A MODERN INFANT SCHOOL

BY

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WITH 46 ILLUSTRATIONS ARRANGED IN SIXTEEN PLATES

SECOND IMPRESSION



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'It is necessary for the author, as a teacher in the service of the London County Council, to state that that body is in no way responsible for the ideas expressed in this book.

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PREFACE

By Dr. P. B. BALLARD, M.A.

To the student of education there is no place so rich in material and in interest as the Infant School. He sees there not only young minds at work but young theories put to the test of experiment and experience. For the Infant School is pre-eminently the pedagogue's laboratory. Not that experiment is absent from other schools; but it is in them hampered by custom and traditions. Only in the Infant School is the soil virgin, the growth rapid, and the crop manifestly good or manifestly bad. Human nature being in the Infant School blatant and unashamed, it is there found wholly impossible to treat the intellectual powers as though they worked by themselves isolated from such disturbing factors as emotions, desires, and volitions. With these young people blundering methods do more obvious harm than with older children, and sound methods more convincingly reveal their soundness. Hence it is not surprising to find that many of the great movements of educational reform have sprung from the Infant School. Learning by doing, individual work, free discipline, pursuits in the place of lessons-all these were tried and practised in the Infant Schools before they began to invade other and higher seats of learning.

Miss Wellock has wisely called her book "A Modern Infant School" and not "The Modern Infant School." For no two Infant Schools are identical; they are not even sufficiently alike to be rightly called by the same distinctive name. We can merely point to certain prevailing tendencies

and say that the dominating influence is Montessorian, or Froebelian, or Neo-Froebelian. By Neo-Froebelianism I mean that modification of Froebel's doctrines which has grown up in America under the influence of John Dewey. It is the force that seems to be strongest in the school described in this book.

The key to Miss Wellock's system lies in the word "project"—a word frequently on the lips of American teachers, but rarely heard in England; and when heard not always understood. A project, however, merely means a job—some definite undertaking such as running a little shop, dramatising a story, or preparing a dolls' tea-party. It might be called a "task," were it not that the word "task" implies a certain measure of distastefulness on the part of the work, and of conscious effort on the part of the worker. A project, on the other hand, should be taken up with joy and pursued with gusto. It is a bit of real life that has been imported into the school. Indeed, learning by living is a better description of the project method than is learning by doing; and the phrase "to live and learn" takes on a new and more generous meaning.

It is a basic principle of the project method that, just as appetite should come before eating, so should the desire to learn come before learning. And it ceases to be difficult to answer the question: When should a child begin to read, to write, or to cipher? For the answer simply is: When he feels the desire. It may be pointed out, however, that the teacher takes good care so to stimulate the desire that it is almost certain to emerge at the time when she thinks proper.

For she lays all sorts of allurements in his way. She stage manages the whole business. And this is true of all good teachers, whatever creed they profess. When a child sees other children of the same age and in the same room striving in the spirit of sport to acquire an art, to master a difficulty, or to carry out a project, he does not care to be "out of it." He wants to be in the swim. Didactic apparatus cunningly displayed is intended to serve the same purpose as a project proposed by the teacher. Both invoke a strong natural motive as the fount and origin of sound achievement. The words ascribed to King John in the play would have been equally true had they been:

"How oft the sight of means to do good deeds Makes good deeds done!"

One great merit of Miss Wellock's book is that it abounds in hints and suggestions. Instead of enclosing a system it opens out wide and numerous vistas. So that no teacher, however wise and experienced, could read it without gaining some benefit. Miss Wellock would, I fancy, be the last to desire that her book should be followed literally at all points, and that attempts should be made to shape other schools on precisely the same pattern as her own. For the very essence of her doctrine is that the Infant School should have a flexible curriculum, so that it should be brought into close relationship with the lives of the pupils. And as those lives vary, the schools should vary too.

Having made this proviso, I confidently commend the book to infant teachers of all kinds and persuasions. I believe it to be the clearest exposition that has appeared in England of certain pedagogical principles which have for nearly a whole generation been moulding the kindergartens of America, but have been imperfectly understood and injudiciously applied on this side of the Atlantic. But it is more than that. It has elements which are native to our soil. It has a number of good things which derive from a variety of sources. It is, in fact, "compounded of many simples, extracted from many objects." May it have many readers, and may it prosper in its mission of enlightenment and inspiration!

P. B. B.

August 1932.

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INTRODUCTION

THE curriculum of the Infant School is dynamic. It grows out of the daily experiences of the children and satisfies their present needs. It is no longer thought of in terms of subjectmatter, but in terms of child activity. The activities vary in each school and with each group of children, because the needs and interests of children differ.

It is not practical to have a large class of children, in the care of one teacher, all working out a different project. Nor is this necessary. It will be found that children having similar interests tend to form a group. One group may be interested in working out a farm project. Another group may be engaged in making a puppet show.

Whatever form the child's early activities may take, the teacher must see that these lead to the formation of good habits, the development of initiative, understanding and the power of concentration, the preservation of natural curiosity and alertness of mind, the development of the ability to tackle problems, to benefit by mistakes, to learn from others, to respect his own rights and those of others.

If the child is to be fitted to take his place as an individual member of the social group, it is essential that he learns certain things. The teacher should so stimulate and direct his interests that he will want to speak correctly, to read, to write, to do simple arithmetical calculations, and to appreciate nature, literature, music, and art.

Learning to read, to write, to do arithmetic has so often been the point at which the child's enthusiasm has died, because the learning of these subjects was imposed upon him and did not spring from his interests. An interest in trains may be directed so that the child wants to learn to read and write the names of stations, to sell tickets, to tell the time, to make time-tables. In a shop he will want price lists and catalogues, posters, notices, advertisements, and labels to distinguish the goods. He will want to weigh and to measure, to know money values, and how to add numbers in order to make out his bills.

The child brings a tremendous amount of joy and zest into his activities when they spring from his interests. This same joy and zest will be carried over into the task of learning to read, to write, and to do number, provided he has felt the need for such learning.

Progress should never be forced in order to reach a certain standard of achievement, but the teacher should see that the child is working up to the level of his ability. Progress will inevitably take place when the child is vitally interested in all that he is doing.

The centres of interest which may be developed in school are many. These are not important in themselves. A project may be worked out in such a way that certain very good results are obtained, and yet it may fail to be truly educative. Children who are interested in aircraft may work out excellent models of aerodromes and aeroplanes, but, unless this interest is developed into new and wider channels, the teacher has failed in her task of stimulating and directing the children.

New interests should never be forced. They should grow

out from the children's present interests. The teacher should always be ready to seize any opportunity for development.

It follows that, if the work is to develop from the children's interests, the school time table can be nothing more than a tentative plan drawn up on very broad lines. When a problem presents itself it must be worked out with no regard for such arbitrary things as time tables.

This book has been written in response to many requests. It is an attempt to record some of the work that has been done in a large elementary school.

For the sake of reference, "subjects" are dealt with separately, but it should not be thought that because of this the subjects are in any way divorced from the children's interests. Many of the interests from which language, reading, writing, and number developed are referred to in the chapters under these titles.

No separate chapters are included on writing and handwork, because these have a place in practically all the activities. The children begin writing because they have need of it. They want to write letters and invitations, and to make news-books.

Handwork plays an important part in most of the activities. The children make what they need in order to make their play more effective. They are trained to think out their own problems. They receive help and stimulation from the teacher and from others in their group. Many kinds of material, such as clay, paint, wood, paper, calico, and various waste materials, are used. The children are en-

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couraged to select the materials which are most suitable for the purpose they have in mind.

The cultural subjects play an important part in the education of the children. There has been no attempt to force all the subjects into some sort of relationship with a certain centre of interest.

Although different projects are described in this book with particular reference to one subject, other subjects were also developed through these same interests.

The diagram on page 15 shows some of the activities which resulted from an interest in a grocer's shop.

READING AND NUMBER WRITING Pricing goods. Buy-Writing letters about ing and selling. shelves, goods, etc. Weighing Reading labels, measuring. Making Keeping advertisements. bills. posters, etc. Comaccounts. piling shop news book, catalogues. LANGUAGE Discussing shops. GROCER'S Planning to have a_ SHOP shop in school. Discussing goods. How to get goods. How goods should be arranged.

TRANSPORT How goods reach the shops. Milk trains, goods trains, ships, vans. etc. Collecting pictures

HANDWORK Fixing and painting Making shelves. paper bags, papier mâché and clay bowls, dishes, fruit, eggs, etc. Designing and making signs, advertiseposters, ments. Making and illustrating cata. logues, shop newspaper.

and

SOCIAL Taking turns at being shopkeeper, cashier. Being responsible for goods and money. Keeping shop clean and tidy. Keeping health rules, clean hands, covering goods from dust. flies, etc. Being courteous.

ACTIVITIES Making bread. Churning, Making butter. Preparing for and giving a party. Making a " Health Play."

OTHER

NATURE

Where goods come from. How goods, cocoa, sugar, etc., are prepared. How bread is made. How butter is made. Which foods are best.

of ships, etc.

Chapter 1

EARLY ACTIVITIES

ACTIVITY is characteristic of the normal healthy child. At home this desire for activity finds an outlet in play, in the exploration of his environment, or in making something he requires, and probably leads him into a good deal of "mischief." The child's need to be "doing" is of the greatest importance, for purposeful child-activity is the very essence of education.

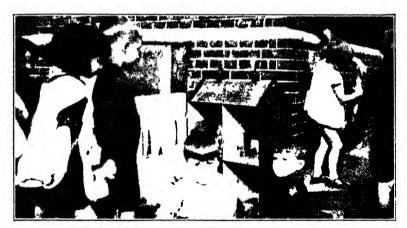
In school the child finds various materials which stimulate his desire for activity. He finds an environment in which he is free to experience and experiment, to purpose and to plan. He also finds a community life simple enough for him to understand, and the guidance necessary for directing his interests and activities into channels of learning.

The materials provided should be such as will stimulate activities of various kinds, and which will create situations which make for intellectual growth. There should be materials which will stimulate physical activity; materials which will provide opportunities for planning, constructing, and creating; materials which will stimulate the child to play with other children; materials which will encourage imaginative play.

Most of the child's activities have physical, constructive, social, and intellectual elements, but the proportion of these elements varies. For instance, when the child is learning to drive a toy motor-car the activity is mainly physical and intellectual. He has to think about his pedalling and steer-



PLAYING MOTHERS AND FATHERS



AN AFFERNOON CALL

ing. Later, when he has become a more expert driver, he uses the motor-car in his dramatic play. The activity is then mainly social. In the following pages the activities are grouped according to whether they are mainly physical, constructive, social, or intellectual.

The child is free to use the materials in any way he wishes, providing his use of them is a legitimate one and he does not interfere with or annoy other children. If he throws the beads about the room, deliberately tears a book, or upsets the work of others, the teacher interferes.

It is by studying the child's reaction to the materials that the teacher is able to decide what sort of guidance he needs. If, after using any material for a considerable time, the child shows little progress, she looks for some means of showing him the further possibilities of that material. When children first use clay they pummel and thump it vigorously without attempting to model anything. This use of clay is quite legitimate in the early stages. If, however, the child continues to use clay in this way without discovering its further possibilities, he is not progressing. He may lose interest in the material because he can think of nothing more to do with it. It is at this point that help and suggestion are most valuable. The teacher shows him how to turn his ball of clay into a bowl or an old man. She arranges for him to visit a room where older children are making pots or modelling animals.

Sometimes the teacher finds it necessary to direct the child's interest to a new activity. A child who is not physically strong may be in danger of over tiring himself because he

plays too long with a skipping-rope. The teacher in this instance directs his interest to an activity in which there is less physical strain. Another child may use one material to the exclusion of all others. The teacher directs his attention to other materials in order to give him wider experience.

The child's attitude to his new environment, the use he makes of the materials, and the way he conducts himself, indicate something of his interests and ability. The boy who plays for the greater part of each morning with wood, hammer, and nails can fairly be said to have an interest in these materials. The teacher will no doubt discover at an early stage whether this interest is a carrying over of a home interest (his father may be a carpenter), or whether it is that his desire for hammer and nails has never been satisfied before. The child who samples every material but concentrates on none may be full of natural curiosity, or, on the other hand, he may lack the power of concentration. Occasionally we find a child who, when he first comes to school, seems to lack interest and initiative. He may feel nervous and strange in his new environment, but as he becomes more accustomed to it he may begin to show both interest and unitiative. He makes friends, who ask him to play with them. He becomes interested in what they are doing, and gradually gains more self-confidence.

The child's various activities make for growth. His progress is indicated by the changes that take place in his behaviour. Is his thinking more effective? Are his feelings more refined? Is his conduct more social? Does he experiment until he finds a way to construct his tower so that it does

not topple over? Does he feel pride in the satisfactory accomplishment of a job he undertakes? Does he take more care of flowers and living creatures? Does he show more pleasure in listening to stories and music? Does he clear up any mess he has made? Does he return things to the rightful owner? Does he act with more courtesy to others?

Certain habits of thought and action, which will not have to be unlearned at a later stage, should be acquired by the child at an early age. Habits which release the mind from thinking constantly of the care of the body, habits which make social intercourse easy, should become automatic. If the child forms such habits as washing his hands when dirty, leaving his paint box and brushes clean after use, returning things to their proper places, much valuable time will be saved later on.

The teacher must study each child in order to discover what habits he has formed at home. She can then decide which of these should be encouraged and which eradicated.

PHYSICAL ACTIVITIES

Daily reminders and talks about the need for keeping the body clean encourage the children to take a pride in having clean hands, faces, teeth. The formation of habits which make for health and cleanliness is of primary importance.

If there are not sufficient wash-basins with running water, then several jugs, bowls, and slop-pails should be provided. Paper towels which can be thrown away after use are most satisfactory. If ordinary towels are used, each child should have his own.

The children are shown how to pour out the water carefully, how to roll up their sleeves and wash their hands well, how to use the nail-brush, how to dry the hands properly. It takes some children a long time to learn that the backs of hands need washing too, that the soap must not be left in the water, that the dirty water must be poured away, the basin rinsed out, and the jug refilled. The children glance in the mirror before wiping their faces to see whether they are clean. As a result, washing operations often begin all over again.

The children soon begin to realise how important an item of dress is the handkerchief. "Handkerchief drill" is taken at intervals during the day. Those children who have forgotten to bring a handkerchief are provided with a paper one. Some children have constantly to be reminded that noses need attention, that the handkerchief should be used when coughing and sneezing.

The children learn how to take off their own hats and coats and hang these on their own pegs. They are shown how to help each other put on their coats. Fastening coats, tying shoe laces, and buttoning slippers are more difficult tasks, and take some time to master.

Lunch is an important feature. The children wash their hands and prepare the lunch tables. The cloths are spread, and bowls of flowers, arranged during the morning, are placed on them. The "waiters" and "waitresses" serve the milk and biscuits carefully. When all are served, "Grace" is sung. Table manners usually require a good deal of attention. Frequent reminders to sip the milk slowly, to take small bites and chew well, not to reach across the table, and

to remain seated until everyone has finished, are necessary. When lunch is over the "waiters" and "waitresses" collect the crockery, sweep up any crumbs, and remove the cloths.

Brooms, dustpans, brushes, mops, various kinds of polish, polishing cloths and dusters are kept in the "Housemaid's cupboard." These are well used. The children polish the tables, chairs, cupboards, shelves, any piece of metal, most energetically. A search is made for things to dust. When a piece of chalk has been trodden on or sand spilled on the floor, the children are quick to sweep it up.

The children love to have "washing days." Small tubs, scrubbing boards, soap, clothes lines, clothes basket and pegs form part of the equipment. The children wash their dolls' clothes, the little sheets, blankets, and counterpanes on the dolls' beds. On fine days the washing is pegged out on the line in the playground.

"Spring-cleaning" is not confined to one season of the year. The dolls' house is turned out two or three times a day. The curtains are washed and rewashed before they have fairly had time to dry. The dressers are subjected to much vigorous scrubbing, and the shining crockery arranged and rearranged with scrupulous care. The dolls do not escape the attention of the busy little housewives. Their faces are washed so often that they begin to look somewhat anæmic.

Little children require plenty of healthy physical activity in the open air. Running, jumping, marching, skipping, hopping, balancing help them to control the movements of their bodies. Most children will avail themselves of any convenient trees, walls, pipes, and ladders for climbing. Where possible suitable apparatus should be provided in order to satisfy this desire to climb. The apparatus intended for use in the playground should be made of sound material which will stand all kinds of weather conditions. Care should be taken that there are no splinters in the wood and that the apparatus is well constructed.

One of the most popular pieces of apparatus is the steps and slide. The children can climb up one side and slide down the other. A mat should be placed for the children to land on. A ladder and support is also popular. The ladder should be placed at a convenient angle and securely fastened to a strong support. The children can swing from the rungs and jump down from different heights.

Swings, see-saws, rocking-boats, and rocking-horses give children opportunities for rocking and swinging. One or two thick, smooth ropes suspended from the top bar of a strong stand, fixed firmly in the ground, are useful for climbing and swinging. A large knot at the bottom of each rope and a few knots at intervals make it easier for the children to hold on to the ropes. A few large stepping-stones, a wooden plank raised slightly at one end, and a balance-board prove a great attraction to little children and help them to gain balance.

The children play with large, durable, simply constructed toys, such as motor-cars, scooters, handcars, cycles, tricycles. These give practice in steering and pedalling. When they first begin to use the toys many of the children are unable to keep them moving. Steering is quite a problem. When they come to a corner they lift their cars round bodily.

They have collisions or come to a dead stop to avoid one. Soon they become quite adept, and take great pride in observing the "rules of the road."

Wheelbarrows loaded with bricks, wagons and trucks filled with sand, perambulators with dolls, engines, milk-carts are pulled and pushed about the hall and playground. Toys of this kind are especially valuable in stimulating dramatic play.

The children soon discover the possibilities of bats, balls, bean bags, hoops, skipping ropes, reins. The balls and hoops vary in size and the ropes in length, so that the children have a selection from which to choose.

Silence games help to train the children to control their bodies. The partial lowering of the blind is the signal which indicates the beginning of the silence game. The children remain as quiet as possible. The teacher whispers a child's name or beckons him to her. He is given an exercise suited to his needs. Children who naturally move awkwardly or noisily are asked to walk round the room on tiptoe and then bring their chairs near the teacher. A child who does not carry things carefully may be asked to fill a mug with water and to carry it to someone at the other side of the room, or to bring a pot of flowers from one of the tables and place it on the teacher's desk.

These games create a quiet, restful atmosphere in which the children are conscious of the slightest sound. They hear the clock ticking, a bird singing, the milkman calling in the next street. Sometimes the children close their eyes and listen to whispered commands. The teacher or leader varies the game by whispering a name and then asking a question. The child whose name has been mentioned answers in a whisper. Occasionally the children put their work away and tidy the room during a silence game. The blinds are drawn up again when the silence game is over.

There is a rest period every day for the youngest children. Light camp beds which they can set up and put away themselves are used. These are carried out into the open air when the weather is suitable. Each child has a blanket and a small pillow. All bedding is marked clearly so that the child can recognise his own. The children are trained to use the toilet before and after sleeping. If the children sleep in the room the windows are opened wide so that there is a plentiful supply of fresh air.

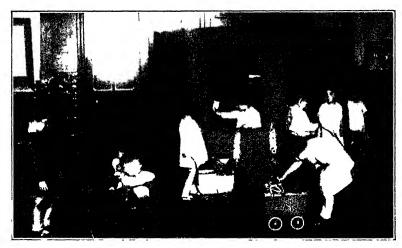
CONSTRUCTIVE AND MANIPULATIVE ACTIVITIES

Play with sand goes a long way towards satisfying the child's desire to dig, pat, and mould. If there is a sand-pit in the playground the children will spend many happy hours building sand castles and making sand pies. Where the sand can be left uncovered the sun and rain will keep it fresh and clean. In the town, where there is a possibility of dirt and paper or stray animals getting into the sand, it is advisable to keep it covered in some way when not in use.

A sand-pit in the corner of the playground can be covered with a three-cornered wooden lid. This can be made in two parts, so that it opens down the middle. When the sand-pit is in use the lids are fastened securely against the wall. If there is not sufficient space for a sand-pit, a large sand trolley



LEARNING "SAFETY FIRST" RULES



A LARGE SCREEN HOUSE STIMULATES DRAMATIC PLAY

on wheels is a useful substitute. Builders' sand is best for the children's play. By keeping the sand damp the danger of dust is eliminated and the sand is more easily moulded.

Hammers, wooden mallets, nails, and soft wood are provided. Sometimes the children do not attempt to construct anything with these materials, but are satisfied with hammering the nails into the wood. At other times there is a definite attempt at construction. One piece of wood is nailed across another for an aeroplane, a sword, or a chopper.

A clay-bin with a liberal supply of clay is another source of delight. Lumps are made into loaves or cakes. Balls are flattened or rolled out to make pastry. Crude cups and saucers are made for the dolls' tea-party. The children are trained to roll the clay into a ball, make a hole in this, and put a little water in the hole before returning the ball to the clay-bin. In this way the clay is kept in good condition.

Bricks form excellent play material. Hollow bricks (about $6 \times 12 \times 12$ in.) form suitable building material for little children. With these the children can build houses, garages, stables, large enough for them to get inside. Smaller building materials can be kept in a good-sized, substantial wooden box on wheels.

The child's constructive ability develops gradually. One boy played with bricks for some time, but did not progress beyond the stage of building a tower and knocking it down again: a box of farm animals was given to him one day when he was playing with his bricks. At first he played with the animals and forgot his bricks, but after a while he put the sheep together and built a wall round them. From

this beginning his building made rapid progress. He built cow-sheds, pig-sties, and stables. He began to plan his work, and the destruction of any part of his building usually meant that he had planned something better to take its place.

Scribbling appeals to children at a very early age. The children use thick coloured pencils, chalks, carpenters' pencils, timber crayons, large brushes, and poster paints. Large sheets of unprinted newspaper, pastel paper, and sugar paper are fastened on boards supported against the wall. The children generally stand while painting or drawing on these large papers.

The child is free to revel in the new experience of painting and drawing. When asked what picture he is making, he often replies that he is just chalking or colouring. After a while he begins to represent things he is interested in. He says that he is making a rainbow, a spider, railway lines, that he is writing a letter, or that one particular portion of the picture is an aeroplane. He paints Jack and Jill. It does not matter to the little artist that Jack has no legs or that his head is bigger than his body. As he works he makes discoveries. He finds that colours mix and make new colours, that too much paint on the brush has disastrous effects.

Wooden beads, buttons, button moulds of various size, shape, and colour are sorted and strung. The first strings are usually miscellaneous affairs. Definite ideas of arrangement according to form, colour, number, develop late. Necklaces, bracelets, and girdles of interesting pattern are made.

SOCIAL AND DRAMATIC ACTIVITIES

The young child is strongly individualistic. When he enters the school community the biggest problem he has to face is that of adjusting himself to the social group. He has to learn to take turns. When it is not possible for him to have the desired toy at the moment he wants it, he must await his turn. He must also be prepared to give up the toy when it is the turn of someone else to have it.

The teacher intervenes only when it is necessary. A command, "Let Tommy have the motor-car, Billy," is of little value. Billy may not realise why he has to give up the motor-car, and may relinquish the toy merely as the result of adult interference. The problem remains unsolved. Both children think they have the sole right to the toy. Billy regards it as his and does not want anyone else to have it. He may seize the first opportunity of snatching the toy back again. Tommy begins to believe that by asking the permission of the teacher he has a right to whatever he wants. A suggestion to Tommy that he should ask Billy to let him play with the motor for a little while is better than a command to Billy to give it up. Billy's attitude to the request indicates to the teacher whether any explanation or interference on her part is necessary.

The selfish desires of little children often result in spiteful actions. The child must learn that he must not upset the work of others or interfere with their play unnecessarily. A little girl who wanted a box of beads another child was using seized the box and scattered the beads all over the floor.

Unsocial behaviour of this kind needs attention at a very early stage.

As the child becomes more accustomed to being a member of the social community he tends to become less exclusively individualistic in his play. The first form of group play is generally that in which a few children with similar toys play together. Two or three little girls play with dolls. They undress them, put them to bed, dress them up again, and take them for a walk round the classroom. Others with dolls and perambulators are "mothers" taking their babies for an airing in the park. Groups of boys with reins play at horses and drivers. After careering round the playground the drivers take their horses to the stable and pretend to feed them.

When children first begin to play together a new problem, that of sharing with others, presents itself. Two little girls were playing with one of the dolls' dressers. They played together quite happily for some time until they decided to wash up. Mary took all the cups, saucers, and plates and put them in a bowl. The other little girl took some of them back. A quarrel ensued. The teacher asked why they were quarrelling, and both the children hastened to explain. The teacher pointed out to Mary that as they were playing together she must let her friend help to wash up too. She suggested that one should wash the things while the other dried them, and that next time they washed up they should change places.

More advanced group play, in which there is a strong dramatic element, gradually develops. Children imitate the



LITTLE MOTHERS

CARTERS



SPRING CLEANING

activities of grown ups with great fidelity. They are doctors, firemen, engine-drivers, bakers, milkmen, bus conductors, policemen. The properties required at this stage are very simple, for young children are past-masters in the art of make-believe, and most of the necessary transformation takes place in the imagination of the players. A piece of old lace curtain has the power of turning almost every little girl into a very fine lady indeed. A table turned upside down becomes a fire-engine. A row of chairs does duty for a bus or train.

A large screen house with window and doorway will stimulate a good deal of dramatic play. The framework can be made of wood. Three sides are generally enough. The wall of the classroom can be used for the fourth. If a corner of the room is used, two sides of framework are sufficient. The sides can be fastened together with upholsterers' webbing, so that they can be turned about in different directions and the house folded up when not in use. The doorway should be high enough for the children to walk through with ease. Three-ply wood or canvas can be fastened to the framework, and painted on the outside to represent bricks and on the inside to represent the interior of a room.

The tenants change frequently, and the furniture is selected and arranged according to the taste of each new house wife. Sometimes the house is arranged as a kitchen. The dolls' dresser with its cups and saucers, the cooking stove with pots and pans, a table with baking board and rolling-pin satisfy one tenant. After a visit of the school dentist one little boy said he was going to be a dentist. He established himself in the house, and ordered the children to come and have their

teeth examined. Often it is the home of a "mother" and "father" and a large family of dolls. The father goes out to work while mother does the cleaning up, attends to her children, or entertains a crowd of visitors who come to tea.

The children talk most of the day. The toys and materials give them new interests and new experiences to talk about, and the teacher has plenty of opportunity for discovering what speech habits the children have already formed. Some children use such baby language as "ta," "Me want geegee"; others mumble or lisp, or are so timid at first that they hardly speak at all.

The atmosphere is such that the child is encouraged to talk and to increase his vocabulary. He hears the names of the toys, of his companions, of the materials and colours he uses, and the flowers he arranges. He learns and begins to make use of polite forms of speech: "Good morning, Miss X"; "Good-bye"; "No, thank you, Tom"; "Yes, please, Mary." He learns how to ask permission to use things which belong to others. At lunch-time he hears such remarks as, "Will you have a little more milk, Joan?"; "Please pass your cup"; "May I have a biscuit, please?"

Often the child does not listen to what is said. In order to learn new forms of speech and to correct defects he must learn to listen attentively. Listening to stories and music and participation in silence games provide excellent training in listening.

Some of the activities described in this chapter are listed below, together with certain changes which it is expected will take place in the child's thought, feeling, and conduct.

ARRIVAL AT SCHOOL—DEPARTURE FROM SCHOOL

Learning:

How to take off and put on coats and mackintoshes.

How to fasten and unfasten coats.

How to hang up clothes properly on the right peg.

How to lace, button, and buckle shoes.

To say "Good morning, Miss X"; "Good afternoon"; "Good-bye."

WASHING

Learning:

To pour water into bowl without spilling.

To wash hands properly and brush nails clean.

To dry hands thoroughly.

To empty away dirty water and rinse out bowl.

To wash when necessary without a reminder.

LUNCH

Preparation

Learning:

How to prepare tables.

To carry milk without spilling.

To wait until everyone is served and "Grace" is said.

Eating

Learning:

To take small bites and to chew properly.

To drink quietly and slowly.

To hold mug by the handle.

To wait until everyone has finished.

Talking

Learning:

To talk quietly at table.

To say "Please"; "Thank you"; "Excuse me."

Not to talk with mouth full.

Clearing Away

Learning:

To clear the table quietly without fuss.

To fold cloths neatly.

To wipe up any spilt milk and sweep up crumbs.

CLEANING, SWEEPING, POLISHING, DUSTING Learning:

To use dust-pan, brush, brooms, mop, duster, polishing cloths.

To select right materials for the activity.

To empty dust into dust-bin and shake dusters outside.

To use polish economically.

BRICKBUILDING

Learning:

To get out and put away the bricks quietly.

To select most suitable bricks for purpose.

Not to throw bricks about.

To build with definite purpose.

Better methods of construction.

To learn from others.

Terms.—Long, longer, longest; wide, short, narrow, broad, front, back, side, high, low, curved, straight, round, square, oblong, etc.

PLAYING WITH SAND

Learning:

To wash hands and roll up sleeves before using sand.

To keep sand in sand trolley.

Not to throw sand about.

To sweep up any spilt sand and put it in the dust bin.

To share the moulds, spoons, measures, and sand toys willingly.

To share space and sand with others.

To play happily together.

Terms.—Empty, full, half-full, quart, pint, half-pint, large, small, shallow, deep, etc.

USING CLAY

Learning:

To wash hands and put on overall before using clay.

To keep clay off the floor.

To keep clay in good condition for use.

The possibilities of clay.

How to model different shapes.

To put handles on jugs, legs on animals, etc.

How to decorate clay pots.

To appreciate beauty of form.

PLAYING WITH TOYS

Learning:

To share toys with others.

To take turns.

To play happily with others.

M.I.S.-C

Developing:

Interest in dramatic play.

The ability to adopt different rôles.

More sustained interest in play.

A larger vocabulary.

The ability to act with more accuracy to fact or fancy.

LOOKING AT PICTURE BOOKS

Finds pleasure in looking at pictures.

Enjoys talking about the pictures.

Learning:

To wash hands before handling pictures or picture books.

How to hold the pictures and picture books.

How to turn the pages properly.

How to place book on bookshelf or book rest.

DRAWING AND PAINTING

Learning:

To get out and put away materials.

How to use brush, pencil, crayon, chalk.

The names of the colours.

Terms.—Dark, light, line, mass, pale, strong colour, etc.

To use materials to express ideas.

To give, take, and use criticism and suggestion.

To appreciate the work of others.

To appreciate colour, proportion, arrangement, in picture and design.

Developing:

Greater ability in expressing ideas and in control of

LISTENING TO MUSIC

Learning:

To listen attentively.

To appreciate good music.

To recognise different types of music: quick, slow loud, soft, lively, sad, etc.

Rhythmic Movement

Learning:

To interpret time, mood, intensity, rhythmic pattern. To control the body.

Singing

Learning:

To sing with light head tones.

To sing in tune.

To enunciate clearly.

Playing in the Band

Learning:

To get out and to put away instruments quietly. How to hold and to play the different instruments.

To watch the conductor.

To conduct the band.

LISTENING TO STORIES AND POETRY

Learning:

To listen attentively.

To appreciate stories and poems of different types animal, fairy, realistic, humorous, etc.

To concentrate for longer periods.

A MODERN INFANT SCHOOL

Developing:

Ability to recall principal characters and events in stories.

Observing Animals, Plants, and Natural Forces

Learning:

About animals, birds, plants, the sun, wind, rain, snow, sky, thunder, lightning, etc.

To appreciate beauty in nature.

Developing:

Interest in nature.

Growing desire to observe nature.

Love for animals, birds, and plants.,

Chapter II

LANGUAGE

"Come and telephone," said the four-year-old, as a visitor walked into the room. The "telephone" was nothing more than the long hook which fastened back the door. "Look! like this," directed the child. He held the hook near his ear, formed a mouthpiece by half closing his fist, and began to talk. "I saw Father Christmas up the town yesterday. He had a big sack full of toys. My Mum's going to ask him to give me a motor-car, a red one—with a real hooter and a lamp. My Rosie wants a doll, 'cos Dick broke hers. Mum's going to ask him for an aeroplane, too. A big, real one, with a 'peller that goes round, and a seat. When I'm a big man I'm going to be an airman. Here you are! You can talk to me now. No! like this."

When she had "telephoned" satisfactorily the visitor was allowed to go. A group of boys who were vigorously hammering nails into pieces of wood attracted her. They were discussing their fathers.

ARTHUR: "My Dad can make things with a hammer. He made my Lily a pram for her doll."

BERTIE: "Coo, my Dad's better than that. He made a cart for my baby to ride in. My Bill pulls it along with a string."

ARTHUR: "My Dad could do that, too."

BERTIE: "No, he couldn't. My Dad's better than yours."

ARTHUR: "He's not, so there."

BERTIE: "He is."

George interrupted with, "My Dad drives an engine."

Arthur and Bertie forgot their disagreement regarding the merits of their respective fathers. An engine driver is always a source of great interest, and is treated with respect.

BERTIE: "What? Does he drive a real engine?"

ARTHUR: "One that goes from Euston?"

GEORGE: "It's a big one. As big as—as big as—a real engine. He's going to take me down to the station tomorrow to see it."

Arthur put his hammer down, and regarded George with something approaching admiration. "Will you go on it?"

GEORGE: "'Spect so! 'Spect he'll take me for a long ride. P'r'aps I shall drive it a bit."

There came a burst of laughter from two children at a wash-tub, and excited cries of:

"Here it is. Oh! it's gone again!"

"It's like a little fish!"

"Look, it's come up again. Let's stir the water round and make it come up."

"I've got it. Ooh! It's so slippery, I can't hold it."

"Hooray! I've got it."

The soap was replaced in the soap dish, and the interrupted business of washing the dolls' clothes began again.

In a room full of activity, chatter is almost incessant. The children talk about what they are doing, their homes, what their kitchens are like, the pudding mother is going to make for dinner. Big brothers and sisters are discussed. They boast of the latest achievements of their babies, for cutting a

tooth, or falling downstairs, is a matter of no small importance.

Lack of attentive listeners is no drawback. Children often hold conversations with themselves or their playthings. A boy who was setting out all the animals in the Noah's Ark talked to each animal as he took it out. When he came to Mr. and Mrs. Noah he took the part of each in turn. Finally, Mr. and Mrs. Noah quarrelled, because Mr. Noah ordered the animals back into the Ark, and Mrs. Noah said they should stop out now.

Such conversations may not be very intelligible to the chance listener. They are not intended to be. Sometimes they consist merely of a string of words or an attractive phrase repeated over and over again. A little girl who had received her first lesson with the Montessori colour tablets lulled herself to sleep by repeating, "This is blue, this is blue, this is blue." After hearing the story of "The Golden Cobwebs," another child was heard to repeat time after time, "All the little baby spiders with their little, little, curly legs—All the little baby spiders with their little, little, curly legs."

When the child wishes to make some definite communication he will endeavour to make his conversation intelligible to the listener. By some means or other, such as gesture, emphasis, or repetition, he will make himself understood in order that he may achieve his object.

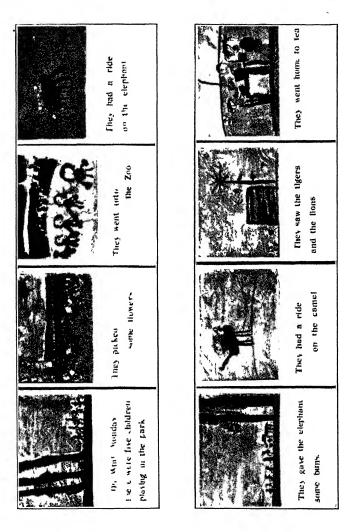
Most children have a fairly large vocabulary before they come to school. Some use words without knowing their real meaning. Kenneth, aged three years, loved to go into the larder. He did so whenever he found the door ajar. His

mother, having visions of smashed eggs, would call out, "Kenneth, come out of mischief!" As going into the larder was Kenneth's particular form of mischief at the time, his mother found it necessary to use the command quite frequently. In consequence, Kenneth began to connect the word "mischief" with the larder. He would run to the door and call out, "Kennie go mischief!" meaning that he was going into the larder.

The child's speech, particularly at this early stage, is a good index to his social environment. A child from a good home usually has a large vocabulary, is able to enunciate clearly, and to pronounce words correctly. The child from a poor home generally has a limited vocabulary. He forms wrong speech habits from the beginning. He is seldom corrected when he speaks badly, largely because his mistakes are not noticed. The mother who says "free" for "three," or "pile" for "pail," is generally incapable of correcting her child's language errors.

If the child's simple natural chatter is to be developed into coherent speech which will be of real service to him in his social life, attention should be directed to three things. Firstly, the child must be taught to speak clearly. Secondly, there must be co-operation between the child and the teacher to eliminate the common errors of speech. Thirdly, the child must be given practice in selecting, arranging, and expressing his ideas.

Although language training is given incidentally throughout the day, there should be periods set apart for more definite training. A" news time" each morning will be found very



valuable. During this news time the children are gathered together, and any item of news the children or teacher may have is given to the class as a whole. At first, all the children want to give their news at once. This problem can be solved by the teacher or a child acting as "chairman," and calling upon the children in turn.

During "news" the children's spontaneity should not be arrested by over-correction of language faults. The teacher should notice the children's individual difficulties, so that she may make provision for these by giving exercises and corrective games.

Sybil had news to tell. She came out, flushed with excitement, and said, "We've got a new-borned baby."

Dick had a small motor to show.

"Will it go?" asked the children. All doubts as to whether the toy would work were settled by Dick winding the motor and letting it run along the floor.

"Where did you get it?" asked the chairman.

"Mum bought it up the town for me last night."

Rose held up her hand.

"What do you want to ask, Rose?" said Dick.

"How much did your toy cost, Dick?"

"Sixpence."

Next, Tommy was chosen to give his news. He spent some time fumbling with a packet on the "News Table," then he produced a collection of birthday cards. "It's me birfday to-day," he said; "these cards are wot me Mum an' Dad an' Auntie an' Uncle an' Bert an' Flo an' Doll sen' me."

As he showed the cards one child said, "Tell us what it says on them."

"I dunno," said Tommy; "me Muvver tol' me, but I've forgot."

The teacher was asked to read the cards for Tommy.

Then Mary gave her news. "It's my Daddy's holiday from work on Saturday, and he's going to take me and my Mummy and my Baby to the seaside."

"Don't forget your spade and pail," said the chairman.

"I'm going to take my bathing dress too, and p'r'aps I shall bring back some shells and some seaweed for school. I'm going to buy a stick of rock for you too; my Mummy says I can."

In order to provide further progress, the teacher should take an active part in the children's news. She may herself give news, at other times she will ask questions. Besides giving an additional stimulus to the conversation by her items of news she should seize every opportunity of enlarging the vocabularies of the children. Sometimes new words are introduced to them. One child brought a photograph taken when her baby was christened. The children did not know the word "christening," so the teacher explained it to them. At Christmas time a frieze was shown in which there were pictures of Father Christmas in a sleigh drawn by reindeer. One child called the reindeer donkeys, another said they were horses, another said they must be cows because they had horns. They were told the correct name and shown more pictures of reindeer.

The news that Joyce was going to the theatre on Saturday

afternoon, and the remark of another child, "You don't call it going to the theatre in the afternoon, because my mother says 'going to—going to—' something I can't remember," gave an opportunity for introducing the word "matinée" to the children. When this class gave a play one afternoon they insisted that the word "matinée" should appear on the posters advertising it.

The children do not always know the correct meaning of the words they use. News time provides opportunities for ensuring that the children have a clear idea of the meaning of words. A child is asked to beat his drum quickly, slowly, softly, loudly, three times, and the children watch to see if he is doing it correctly. He is asked to fire his toy cannon twice, to fire it rapidly. When someone says that her auntie is going to bring her little sister (meaning her cousin) to see her, the different relationships are discussed.

When the child first begins to give news he may simply show his new toy without saying anything. He should be encouraged to say something about it. He may be inclined to whisper to the teacher, but the eagerness of the children to hear the news will encourage the speaker to make himself audible. Some children talk a great deal when they give news. They ramble from one subject to another, joining their statements together by means of "and," "and so," "well, then," without any attempt to arrange their ideas or to express them clearly. As the children grow older they become more critical of muddled sentences, inatticulate speech, and the habit of rambling from one subject to another.

The character of the news changes as the children develop. Fewer toys are brought. Instead, the children describe interesting events, places they have visited, books they have read. They begin to prepare their news. Those who have news for the next day write their names and the subject of their news on the notice-board. The chairman refers to this list when calling upon the speakers in news time. The following list appeared on the notice-board in one of the rooms occupied by the older children.

News

Subject

My dog.

How I decorated my pot.

My new printing set.

My uncle's farm.

A story I read at home.

What I did at the Zoo on Saturday.

Speaker

Tommy Jones.

Willie Price.

Joe Randall.

Joyce White.

Arthur Cranwell.

Sometimes a child makes something at home and brings it to school to show. Freda, aged six, arrived one morning with a mysterious-looking parcel. "What have you brought, Freda?"; "Do let us peep!"; "Is it your news, Freda?" were the remarks that greeted her.

"I'll tell you all about it, and show it to you in news," said Freda. In news time Freda undid her parcel saying, "It's something I've made to make our room look beautiful," and she displayed a jam-jar decorated with pieces of brightly coloured tinfoil. The children were tremendously impressed.

"Did you do it all by yourself, Freda?"

- "Yes, Mummie showed me, and then I did it."
- "Wish I could make one!" said Joe.
- "Well, why don't you, Joe?" said Miss X.
- "Don't know how to."
- "Miss X will show you," said Kathleen hopefully.
- "No, I don't know how to do it. It's Freda who knows."
- "Can Freda show us, then?"
- "Why, certainly. Would you like to show us, Freda?" said Miss X.

Freda said she would, and during the morning put up this notice.

Please bring these things this afternoon if you want to decorate a jam-jar like mine:

A jam jar.

Pieces of plain tinfoil.

Pieces of coloured tinfoil.

FREDA.

In the afternoon about a dozen children brought jars and paper. Freda conducted her group, telling the children where to sit, and arranging for the distribution of scissors, paste, palettes, and brushes. She gave directions and practical help whenever necessary.

Children from other rooms are invited to come in news time to tell how they made bread, to show the theatre they are making. One boy said that his brother in the senior department was making a yacht. An invitation to come and talk about it was sent to the brother. He brought his yacht, and explained how he was making it, and promised to bring it again when he had finished it.

Peter showed a miniature cinema in news time. After an exhaustive examination of the cinema, Joan said, "Wouldn't it be fun to have one for our class?" The teacher said that she thought it would be possible for the class to make one similar to Peter's. The children discussed how it could be done. They said they could paint pictures and mount these on a long roll of paper. The teacher suggested that they should have a wooden soller at each end of the roll and transfer the film from one roller to the other as it was shown. Tommy arrived with a wooden box from which the lid and bottom had been removed.

"This is for the cinema," he said. "Daddy says if you hang a curtain at the back it will make a good stage. We can hold a roller at each side of the stage then."

The story of "The House that Jack Built" was chosen for the film. The children painted pictures for each incident of the story, and the best ones were selected by the class and mounted on the "film."

It was necessary to have two operators, and, as the film was to be a "talkie," a speaker was also required. Several operators were disqualified, because they turned the film either too quickly or too slowly. The speaker was chosen with special care. The children drew up a list of points that the speaker should remember:

Stand up straight.

Keep your hands out of your pockets.

Speak out.

Don't hurry.

An election took place. It was an exciting affair, for

competition was very keen. Finally, Mary was elected as speaker for the first show.

The news that this class had a cinema soon spread, and, in response to many requests, an invitation was sent to each class in turn:

A FILM, called

"The House that Jack Built," will be shown in the hall to-morrow at 3.30 p.m. Please bring your chairs.

Some children enter school with a very good understanding of the meaning of many words, but without the ability to control their vocal organs sufficiently to use these words. The teacher discovers the difficulties and needs of each child through the informal conversations and news talks. One child is unable to speak clearly because he breathes incorrectly, and has little control over his breath. He needs breathing exercises. Another slurs his words together and speaks indistinctly, because he makes as few lip movements as possible. He needs games and exercises to help lip movements. Other children have difficulty in making certain sounds, for instance, 'th,' 'w,' 's,' 'r,' 'c.' Unless there is a definite physical defect, children can be trained to say all words correctly. Encouragement and constant help are necessary, but it is equally important that the children are trained to listen carefully.

It is essential that the children learn to breathe correctly if they are to speak well. All breathing exercises should be simple, and should be accompanied by a feeling of comfort and pleasure. They should not be taken for longer than two or three minutes at a time. Informal exercises only should be given to the younger children. Pretending to blow up a balloon, to puff away dandelion seeds, to blow a feather, or to smell a flower, are favourites.

The older children may have some thythmic breathing exercises. They should stand in an upright position, with the weight on the balls of the feet, and the knees slightly pressed back. If they are sitting they should be told to sit as far back as they can on the seat, and to press the shoulder blades against the back of the chair. There should be no feeling of rigidity about the chest or shoulders. The children may place the backs of their hands just at the waist and feel the swinging outwards of the lower ribs when they breathe in, and the swinging inward of the ribs when they breathe out.

An easy exercise to begin with is for the children to breathe in and out through the nose while the teacher counts "one, two, three—one, two three," or "in, two, three—out, two, three." When the children are able to do this easily and quietly they may be given a little more difficult exercise. In this one the breath is held for three beats before it is expelled, and there is a rest of three beats before a new breath is taken:

In, two, three, Rest, two, three, Out, two, three, Rest, two, three.

The children may be given an exercise which will help them to take a deep breath quietly at the beginning of a phrase or passage when singing or reading. They may be told that this exercise is a "smiling" one, for in it the lips and teeth are slightly parted while breath is taken in. Breath is taken in partly through the mose and partly through the mouth. This exercise may also be done to rhythmic counting in the same way as the previous exercise.

An exercise for getting the children to clear the lungs well is to tell them to take in a breath as before to three beats, to open their mouths, and on the word "out" to expel the breath quickly to "Ha!" A rest of two beats is counted before the exercise is repeated.

In, two, three.

"Ha!" two, three. (The final two beats are the rest beats.)

It is only by giving the children freedom to talk that the teacher can discover their individual difficulties. Incidents of all kinds give rise to informal conversations. The following discussion was overheard one morning when some children were counting the pennies paid for milk during the week:

"Wha' a lo' o' pennies!" said Roy. "Wha'll Miss X do wi'em?"

"I 'spect she'll spend 'em," remarked Willie.

Mary put them right on this point. "She's got to pay the milkman. He brings the milk."

"My Dad's a milkman," Peter informed them. "'E's go' lots er cans full er milk."

"Where's 'e ge' it ?" asked Roy.

M.I.S.—D

Peter was not sure.

- "Oh, I know," said Joe, "cows give us milk. I 'spec' Peter's Dad's go' some cows. Ain' e', Peter:"
 - " No!"
 - "Well, where's 'e ge' the milk, then ?" repeated Roy.
- "I 'spec' the man 'oo 'as the cows lets 'im 'ave it," Joe suggested.
 - "Well, he ought to have the money," said Mary.
 - "No, it's the cows wha' oughter 'ave the money," said Joe. A burst of laughter greeted this remark.
 - "Garn! Cows don' 'ave money," said Peter scornfully.
- "Cows only want grass," said Mary, "and they don't have to buy that."
- "'Ay as well," said Joe, "an' jer'ave to buy'ay. I know, 'cos my uncle wha' lives down the country tol' me that."
- "Well, then, the man who keeps the cows ought to have all the money," said Mary emphatically.
- "Wha' abah' the milkman, then?" asked Peter. "I seen 'im bringin' the milk 'ere. Well, I reckon 'e oughter 'ave the money, oughtn't 'e, Miss X?"

Miss X explained that the money they brought for milk was paid to the milkman, and that he, in turn, paid the farmer who kept the cows.

This conversation, which took place between a group of children from poor homes, shows some of the varied language mistakes that have to be corrected in school. Language games and exercises are a valuable help in correcting mistakes. Such games should always be jolly and full of fun. Small individual mirrors are used as much as possible

during the speech-training exercises. The children like to watch their mouths when they are saying the jingles, and the use of mirrors adds to the fun of the lesson.

The following games and exercises, some of which were made up by the teacher, are examples of those used with the children whose conversation is recorded above.

PRACTICE IN SOUNDING INITIAL AND FINAL "T" AND "T" OCCURRING IN THE MIDDLE OF WORDS

Betty Batty bought a bit of butter,

A bit of butter Betty Batty bought.

If Betty Batty bought a bit of butter,

Where is the bit of butter Betty Batty bought?

Pitter, patter, pitter, pat, Listen to the rain! Pitter, patter, pitter, pat, Down the raindrops came.

Kitty Tatter's coat is tattered,
Her hat is tattered too,
Kitty Tatter's clothes are tattered,
What will Kitty do?

Tilly Tully taught ten tiny tinkers,
Ten tiny tinkers Tilly Tully taught.

If Tilly Tully taught ten tiny tinkers,
Where are the tiny tinkers Tilly Tully taught?

Too, toh, taw, tah, tay, tee. Oot, oht, awt, aht, ayt, eet.

PRACTICE IN SOUNDING "P"

Peter Piper picked a peck of pickled pepper.

A peck of pickled pepper Peter Piper picked.

If Peter Piper picked a peck of pickled pepper,

Where is the peck of pickled pepper Peter Piper picked?

As I was going up Pippin Hıll, Pıppin Hıll was dırty. There I met a pretty Mıss, And she dropped me a curtsey.

Once I saw a little bird
Come hop, hop, hop;
So I cried, "Little bird,
Will you stop, stop, stop?"

Peter, Peter, pumpkin-cater, Had a wife and couldn't keep her; He put her in a pumpkin shell, And there he kept her very well.

Poo, poh, paw, pah, pay, pee. Oop, ohp, awp, ahp, ayp, eep. Ap, ep, ip, op, up. Pap, pep, pip, pop, pup.

PRACTICE IN USING "H"
See how high her Highness
Holds her haughty head.

Hick-a-more, Hack-a-more, On the King's kitchen door; All the King's horses, And all the King's men, Couldn't drive Hick-a-more, Hack-a-more, Off the King's kitchen door.

Hippety, hoppety,
Hip, hop!
Here he comes hopping alone.
Hippety, hoppety,
Hippety, hoppety,
Hopping the whole way home.

Humpty Dumpty sat on a wall, Humpty Dumpty had a great fall. All the King's horses, and all the King's men, Couldn't put Humpty Dumpty together again.

PRACTICE IN SOUNDING "L"

Lily leapt high,
Lally leapt low,
Lily held tight,
Lally let go.

Laura liked lollipops, Laura liked lemon drops, Laura liked lollipops And lemon drops too! As I walked by myself,
And talked to myself,
Myself said unto me:
"Look to thyself,
Take care of thyself,
For nobody cares for thee."

Polly, put the kettle on, Polly, put the kettle on, Polly, put the kettle on, And let's drink tea.

If I had as much money as I could tell, I never would cry, "Young lambs to sell; Young lambs to sell, young lambs to sell."; I never would cry, "Young lambs to sell."

Bells, bells, what would you tell?

Lippety, loppety, lippety, loppety, loppety lop!

(To be said slowly at first, and later with increasing speed.)

Loo, loh, law, lah, lay, lee. Ool, ohl, awl, ahl, ayl, eel.

"TH" VOICED AND VOICELESS
There was a king in Thule.
There came three ships at break of day.
These, then, are the three thoughtless thieves.

Bertha and Martha
Filled both the baths.
"Bother!" said Bertha,
"Splother!" said Martha.
Bertha and Martha
Filled both the baths.

INITIAL AND FINAL "M"

Miss Molly made muffins,
Miss Matty made mince,
Miss Milly made marmalade,
Made it from quince.
I'll eat the muffins,
You eat the mince,
Mab eat the marmalade
Made from the quince.

The Man in the Moon looked out of the moon, Looked out of the moon and said, "'Tis time for all children on the earth To think of getting to bed!"

Bumble bees are humming, Hummmmmmm, hummmmmmmmm.

Humming tunes to "m"

Moo, moh, maw, mah, may, mee. Oom, ohm, awm, ahm, aym, eem. Am, em, im, om, um.

INITIAL AND FINAL "N"

Naughty, nimble, nickety Nan, Knocked her nose on the kneading-pan. Now, naughty, nimble, nickety Nan, Never goes near the kneading-pan.

> Swan, swan, over the sea; Swim, swan, swim! Swan, swan, back again; Well swum, swan!

Nineteen new ninepins near Nora's nice brown fan.

Humming tunes to "n."
Noo, noh, naw, nah, nay, nee.
Oon, ohn, awn, ahn, ayn, cen.
Nan, nen, nin, non, nun.

PRACTICE IN SOUNDING "NG"

As I was going along, along, Asinging a comical song, song, song, The lane that I went was so long, long, long, And the song that I sang was so long, long, long, And so I went singing along.

> The bells are ringing, The birds are singing, We are swinging In the old apple tree.

Sing, sing, what shall I sing?
The cat's run away with the pudding string!

Ding dong ding dong ding, This is how the strong bells swing.

Dong ding dong ding dong ding dong Bells are swinging all day long.

Ding dong boom!

Ding dong boom!

Humming tunes to ding, ting, ning, ming, etc.

" ōō "

Cobbler, Cobbler, mend my shoe, Get it done by half-past two.

The dove sings, "Coope-coo, Me and my poor two."

Cock-a-doodle-doo!
My dame has lost her shoe;
My master's lost his fiddling-stick,
And doesn't know what to do.

Cock-a-doodle-doo!
What is my dame to do?
Till master's found his fiddling-stick,
She'll dance without her shoe.

"o"

One man went to mow, Went to mow a meadow, One man and his dog, Went to mow a meadow.

The north wind doth blow And we shall have snow.

Old King Cole
Was a merry old soul,
And a merry old soul was he;
He called for his pipe,
And he called for his bowl,
And he called for his fiddlers three.

"ī"

At the siege of Belleisle, I was there all the while, All the while, all the while, At the siege of Belleisle.

> Bye, bye, baby, Baby go to bye-bye.

In a cottage in Fife
Lived a man and his wife,
Who, believe me, were comical folk;
For to people's surprise,
They saw with their eyes,
And their tongues moved whenever they spoke.

"ow"

"Bow-wow-wow."
"Whose dog art thou?"
"Little Tommy Tinker's dog,
Bow-wow-wow."

There is a mouse in our house, Our house is in the town; And so, you see, that little mouse Is in a house within the town.

" AY"

Pat-a-cake, pat-a-cake,
Baker's man!
Bake me a cake
As fast as you can.
Pat it and prick it
And mark it with "t,"
And put it in the oven
For Tommy and me.

Lazy Maisie, Lazy Maisie, Will you bake a little cake? Lazy Maisie is too lazy To make and bake a little cake.

PRACTICE IN SAYING "ISN'T" OR "HAVEN'T" INSTEAD

OF "AIN'T"

One child goes out of the room. The leader of the game shows something to eight or ten children. The child outside then returns to the room and tries to find out who saw the object.

"Have you seen it, Jane?"
"No, George, I haven't seen it. Billy saw it."

Billy goes to the front of the room. George continues his questioning until he has discovered all the children who saw

the object. He then questions these children to find out what the object is.

"Is it an animal?" "Is it a mineral?"

"Is it a vegetable?"

" Is it a fruit?"

"Is it a plant?"

"Is it on my table?"
"Is it on Billy's table?"

"Is it on Jane's table?"

"Is it a fern?"

"No, it isn't an animal."

"No, it isn't a mineral."

"No, it isn't a vegetable."

"No, it isn't a fruit."

"Yes, it is a plant." "No, it is not on your table."

"No, it is not on Billy's table."

"Yes, it is on Jane's table."

"Yes, it is a fern."

PRACTICE IN SAYING "I SAW" INSTEAD OF "I SAW-R," "I SEE-N," AND "I SEE-D"

The children form two teams. A child in one team questions a child in the other team. When a child fails to answer, or makes an error in speech, a point is scored by the opposing team.

"Where did you see a loaf?" "I saw a loaf in the baker's shop."

"Where did you see a cat?" "I saw a cat in the

"Where did you see a ball?" "I saw a ball in the toy shop."

"Where did you see an engine?" "I saw an engine at the station."

"Where did you see a cow?" "I saw a cow in the country."

PRACTICE IN SAYING "DOESN'T" INSTEAD OF "DON'T"

The class is divided into two teams. One team gives sentences, using the word "doesn't." When a mistake is made the other team continues.

My sister doesn't come to school. My baby doesn't talk.
The milkman doesn't sell shoes.
A cat doesn't bark.
My mother doesn't grumble.
A pig doesn't sing.

PRACTICE IN SAYING "DID YOU" INSTEAD OF "DID JER"

The interest in this game depends largely on the speed with which it is conducted. The children are asked to think of something they saw as they came to school. The class is divided into two teams. The first child in one team addresses the first child in the other team.

MARY: "I saw a dust cart. What did you see, Tommy?"

TOMMY: "I saw a man on a horse. What did you see, Joe?"

JOE: "I saw a tram-car. What did you see, Roy?"
Roy: "I saw a motor-car. What did you see, Stanley?"

PRACTICE IN SAYING "SHOULD HAVE" INSTEAD OF "OUGHT/ER 'AVE"

Who should have the hammer? The carpenter should have the hammer.

Who should have the churn? The dairymaid should have the churn.

Who should have the rolling-pin? The cook should have the rolling-pin.

Who should have the wash-tub? The washer-woman should have the wash-tub.

The most valuable exercises are often those composed by the children themselves. Some children in one class needed practice in saying "f," so the children were asked to suggest words beginning with this letter. These words were written on the blackboard: five, fellows, flood, fix, found, fat, fish, fell, fox, flowing, father, fast, fun, fifty, fowls, feather, February. The children used words in this list in order to make up these exercises:

Five fat fellows fishing in February Fell into the fast-flowing flood.

Four foxes found fifty fat feathery fowls. "Fred, fix those foxes," said Father.

A few days later one of the children brought his little brother and announced, "Micky couldn't say 'f,' but I've taught him to say 'Five fat fellows.' Will you hear him?"

On another occasion, when attention was being directed to the sound "oo," a little girl happened to bring some bluebells, and a child remarked, "Blue bluebells,' that's got 'oo' in it."

"Yes," said someone; 'Two blue bluebells.' There are three 'oo's' in that."

"Let's say, 'Two blue bluebells in a blue bowl,' then there are four 'oo's' in it," suggested another.

The children and the teacher had a great deal of fun making nonsense rhymes for other sounds, e.g. "th."

That thumping thrasher
Thrashed this thief too.
"Thank thee, thumping thrasher,
That will do."

Three thirsty thinkers
Thought this thing through:
"If thirty thousand thistle heads
Were thrown through the wicket,
How many thousand thistle beds
Would grow within the thicket?"

"SKS"

He whisks six flasks off the desks.

She asks if her tasks are to make the masks.

" C"

"Cock-a-doodle-doo!" cried the crowing cock.

[&]quot;Cluck! Cluck! Cluck" called the clucking hen.
"Cheep! Cheep!" chirped the cheery chicks.

[&]quot;Cackle, cackle, cackle," said the cackling hen,

[&]quot;Come along home with me, all my ten !"

" N "

Ned knocked nine new nails.

Nine new nails knocked Ned.

Ned knocked nine new nails,

He knocked them on the head

Knock, knick, knock, knick,

Knock, knick, knock.

" R"

Rosie ran round the ring,
Rosie ran round the road,
Rosie ran round the round hay-ricks,
Rosie rode home with the load.

" w"

Weary Willie went his way,
Through the woods he wandered.
When Weary Willie went that way
His weeping mother wondered.

" v"

"Yah! Yah! Yah!" yelled the big tall Yank, "Yeh, yeh, yeh," yawned the yielding youth.

The children learn largely by imitation to stress words for emphasis, and to use a variety of pitch and tone when they speak. A pleasing rise and fall in tone adds to the beauty of the voice and to the interest of what is said. A common fault is that of making great changes in pitch. The rise and

fall of the voice should generally be gentle and not exaggerated. Many people tend to pitch the voice too high. This leads to a high, rasping tone, which is distressing to listen to.

Practice in varying the pitch of the voice may be given by means of nursery rhymes. The children notice that the voice is raised at the end of a question.

"Pussy Cat, Pussy Cat, where have you been?"

"Little Maid, Pretty Maid, whither goest thou?"

"Curly Locks, Curly Locks, wilt thou be mine?"

"Willie Boy, Willie Boy, where are you going?"

"Bow-wow.wow, whose dog art thou?"

"Where have you been all the day, Billy Boy, Billy Boy?"

A change of pitch marks the change from, or to, a quotation.

"Who killed Cock Robin?"

"I," said the Sparrow.

"I'm going a-milking, sir," she said.

"Old Woman, old Woman, old Woman!" said I,

"Whither, oh whither, oh whither so high?"

Says the Pieman to Simple Simon,

"Show me first your penny."

Says Simple Simon to the Pieman,

"Indeed! I have not any!"

"What makes the lamb love Mary so?" The eager children cry.

"Oh, Mary loves the lamb, you know," The teacher did reply.

MODERN INFANT SCHOOL

"To bed! To bed!" says Sleepy Head.

"Tarry awhile," says Slow.
"Put on the pan," says Greedy Nan,

"We'll sup before we go."

Another common fault, especially in reading, is that of dropping the voice at the end of every sentence, and slurring or mumbling the final words in the sentence. It is a good plan to send the children in turn as far from the rest of the class as possible, and give them sentences to say in which the last words are the most important, e.g.:

My name is Mary Davis. I live at 76 Broyle Buildings. My ball is blue. I have a baby brother. I am going to the seaside.

An exercise for helping the children to feel the importance of stress is to let them emphasise different words in a sentence. noting the different impression this gives.

The cat ran after your dog. The cat ran after your dog.

Dramatising stories helps children to increase the flexibility of their voices, and shows them how different tones of voice may be used to express different emotions, or to suggest different people. A child who was playing the part of Father Bear asked in his ordinary voice, "Who has been eating my porridge?" At the end of the play the other children criticised him. "Father Bear's voice wasn't gruff enough. It was just Leslie's voice."

It is helpful to let the whole class practise talking as the different characters in their stories talk. For instance, in "The Three Billy Goats Gruff" the children pitch their voices on a low, a middle, and a high note to suit each of the three Billy Goats. Sometimes the children are divided into groups, one group taking the part of Big Billy Goat, one of Middle Billy Goat, one of Baby Billy Goat, and one of the Troll.

Where children have plenty of experience of good, clear sentences in their reading, they will better be able to express themselves in well-constructed sentences. The children are constantly making sentences when they prepare notices and bulletins in connection with their projects. These bulletins, besides being exercises in composition, serve as reading material.

The children were giving a party for their mothers at Christmas time. One morning they went to buy the goods they had decided they needed for the party. When they returned to school they prepared the following bulletin of the morning's expedition.

This morning we went shopping.

Miss X—— went with us.

We went to the shop on the corner.

We nearly filled the shop.

We put the things in our baskets.

When we came back we made out the bill.

The children sometimes compose stories together. One child suggests a beginning for the story, and then various suggestions are made as to how the story should continue. Different sentences are given and criticised from many points of view by the children before they decide which they will include in the story.

One child started a story by saying, "Once there was a little girl and boy. Their names were Jenny and Tommy." Then someone suggested, "They got losted in the woods." Another child said, "It would be better to say 'They were lost in the woods,' wouldn't it?" This was accepted, and was followed by "The gipsies caught them."

The next sentence, "They put them in their caravan" caused some discussion.

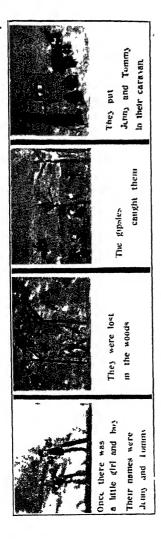
"What do you mean? Who put them in their caravan?" said Hugh.

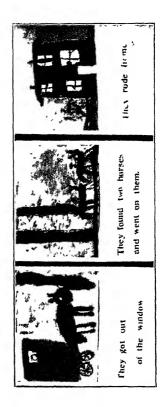
"The gipsies put Jenny and Tommy in, of course," said the child who had suggested the sentence.

"Well, then," said Hugh, "say 'They put Jenny and Tommy in their caravan.' Then we shall know."

The sentence, "They got out of the window," was accepted without comment from the children. The teacher suggested that in this sentence it was not clear to whom the word "they" referred. The children assured her that it was, "because," they explained, "the gipsies weren't in the caravan!"

It is not always the construction of the sentence that is criticised. Sometimes it is the development or the probability of the story. After the sentence, "They put Jenny and





Tommy in their caravan," had been written on the board, someone suggested that it should be followed by "They found two horses and went on them."

"That won't do," said one of the children. "The story doesn't tell us whether the children got out of the caravan. Let's say, 'They got out of the window' before we say about the horses."

Another story began as follows:

"Two ladies and two gentlemen went to the seaside.

They went out in a boat.

They looked up at the sky and saw the birds."

The next suggestion was, "They looked down into the water and saw the fishes swimming about."

"Don't you think it would sound better to say,

'They looked up at the sky and saw the birds.
They looked down into the water and saw the fishes.'?

That makes it like a pattern," said Muriel.

After the children had composed four or five of these stories together, Connie, aged five and a half years, said, "I am going to make a story of my own to-day." She asked the teacher to write down the story she told, so that she could copy it. This is the story:

THE STORY OF JOANIE AND JACK

There was a little girl and boy.

Their names were Joanie and Jack.

They were going home to tea. They saw a motor-car.

When they got indoors they had their tea.

When they had finished their tea they played with their rocking-horse.

Then they went to bed.

During the next few days Connie painted a picture to illustrate each episode of the story. The teacher helped her to mount the pictures, and then Connie wrote the words under them. Finally, all the sheets were bound together, and Connie presented her book to the class library.

Other children in the same class, inspired by Connie's idea, also wrote stories and made books of their own. These stories showed considerable variety of style and subject.

THE FAG ENDS

One day I saw a poor man walking along the street. He was picking up fag ends.

He turned round the corner, and I never saw him again.

By Joan.

THE GARDEN

Once I saw a lovely garden.

I said to myself, "It is most wonderful how God made it."

Now I see lovely flowers in our classroom.

In the middle of the garden there is a little white house.

The windows are shut and so are the doors.

By Daisy.

Some of the older children started a magazine. They selected an editor and a magazine committee. They

decided that it should be the duty of this committee to arrange class meetings, to choose the best articles for the magazine, and to be responsible for producing a magazine each month. The discussions which took place in connection with the magazine gave the children excellent practice in addressing an audience. One editor was asked to resign his position because he could not manage a meeting efficiently.

"You can't keep us in order," the children complained;
you let a lot of us talk at once."

When the committee rejected an article they were expected to give their reasons. If the reasons were considered poor, or if an article which was considered to be not up to standard appeared in the magazine, the committee had to meet the criticisms of the class.

If there was a shortage of contributions, or articles on any special subject were wanted, the editor put up a notice. The following were written in response to a notice asking for articles about animals:

LIONS

Lions are big animals. They live in hot countries. They are very fierce.

My Dog

Peter is the name of my dog. He has long white hair and lovely brown eyes. We run races together, and Peter always wins. He laughs when he wins.

A Monkey at the Zoo

I saw a monkey at the Zoo.

It pinched a glass off a lady.

It made funny faces at itself in the glass, and all the people laughed.

Some Fun with my Rabbit

On Sunday I let my rabbit run on the grass.

He would not go back in his hutch. He hid in the bushes. When I caught him he wriggled his nose.

The first article was rejected by the committee, because they did not consider it interesting enough. The second and fourth were accepted without criticism. The third article was returned to the author with the suggestion that it would be better to say, "It snatched a glass from the lady."

Sometimes a child will write about something that has happened in school. One morning some doves were brought into the top-grade room. At the end of a discussion about the doves the teacher asked the children to suggest words that would best describe the feathers, food, and song of the birds. These suggestions were selected.

Feathers.—Shiny, grey, soft, silky, smooth.

Food.—Corn, water.

Song.—Coo.coo, sleepy, sad, quiet.

One child made use of these words in writing the following article for the magazine.

"Two doves were brought into our room this morning. They have shiny, grey feathers, which feel soft and

smooth when you touch them. The doves live in a large cage. They have a pot of water and some corn in their cage. All day long they sing 'Coo.coo, coo.coo.' Joyce says it makes her feel sad. Their song makes me feel sleepy. Perhaps they are thinking of the garden they have come from. Soon they will be going back to their garden, and then they will be happy."

The children wanted to have a Harvest Play. They suggested that the play should tell the story of a loaf of brown bread. They discussed the scenes they would have in the play, and a list was written on the board:

- i. The farmer sowing the seeds.
- 2. The sun waking the seeds.
- 3. The raindrops making the seeds grow.
- 4. The farmer coming to see how the corn had grown.
- 5. The reaper cutting the corn.
- 6. The thrasher thrashing the corn.
- 7. The farmer taking the corn to the miller.
- 8. The miller grinding the corn.
- 9. The baker coming to the miller for flour.
- 10. The baker making bread.
- 11. A mother coming to buy a loaf.
- 12. The mother, father, and three children having tea.

The children selected the characters for the play. When the children began acting no words were suggested, but Arthur, who was the farmer, said, "I am the farmer sowing the seeds." Next the "sun" ran in and said, "I am the sun that wakes the seeds up." The children then suggested

that all the characters should come in in turn and say what they represented.

The question of properties was discussed, and the children decided what would be required for the play. Joan, "the mother," brought two rolls of crêpe paper to school, and announced that she was going to make herself a skirt and blouse. The teacher helped her to cut the paper and to fix it with pins before Joan started sewing it. The farmer made himself some gaiters with stiff brown paper. Alan took some clay, and said that he was going to make a large pot for the farmer to carry his seeds in. On one side of the pot he printed the word "seeds."

The teacher helped the "miller" and "baker," both boys of five years of age, to cut out hats from paper. They sewed these themselves. Others suggested that they should make a tea-set from clay. They made cups and saucers and plates. When these were dry they painted them green and red. They were unsuccessful with the teapot, so one little girl lent one she had at home.

The mother of the "sun" offered to make her a yellow dress and head-dress. The reaper made a sickle. He cut the shape of the sickle from cardboard, and covered the blade with silver paper and the handle with yellow paper.

The children suggested that they should buy a brown loaf to put in the baker's shop. Frances, however, had a better idea. "Why can't we make the bread ourselves?" she asked. "We've made lots of other things."

This idea was seized upon by all the children. They knew that Alan's father was a baker, so they sent him a

letter asking him to give them a recipe for making brown bread. He offered to come and make the bread for the children. He came to school next morning, bringing the necessary things with him. He made the dough, left it to rise, and returned in the afternoon to supervise the baking.

The stage was arranged very simply. On the left was the mill, represented by a low screen behind which the miller stood. Near the mill stood the thrasher. At the centre back of the stage were the bakery and baker's shop, and on a table nearby stood a large mixing bowl, a jug, spoon, and bread tins. Another table, on which were the brown loaves made by Alan's father, was the counter of the shop. To the right of the stage was the house where the mother, father, and children lived. The house was represented by a small table on which stood cups, saucers, plates, made by the children, and by another table, round which five chairs were arranged. To the front of the stage was the farmer's field. This was represented by a large oblong chalked on the floor.

When the play was given during Harvest Week it took this form.

A HARVEST PLAY

The FARMER comes in. He pretends to sow seeds.

FARMER: I am the Farmer sowing the seeds.

(Exit FARMER. SUN enters.)

SUN: I am the Sun that wakes the seeds up.

(Exit SUN. RAINDROPS come in and run lightly over the field.)

RAINDROPS: We are the Raindrops that make the seeds grow.

(Exit RAINDROPS. Enter FARMER.)

FARMER: The corn is ready to be cut. I must fetch a man to cut the corn.

(Exit FARMER. REAPER comes in, carrying a sickle.)

REAPER: I am the Reaper who cuts the corn.

(He pretends to cut the corn and bind it into sheaves. The FARMER enters, with two "horses" pulling a cart. Some sheaves of corn are put into the cart and taken to the THRASHER. Exit REAPER.)

THRASHER: I am the Thrasher thrashing the corn.

(He gives a bag of grain to the FARMER, who takes it to the mill.)

FARMER: Here you are, Miller. Here is your corn.

MILLER: Thank you, Farmer.

(Exit FARMER.)

I am the Miller that grinds the corn.

(BAKER leaves his bakery, and walks to the mill.)

BAKER: Please, Miller, may I have some flour?

MILLER (handing the Baker a bag of flour): Here you are, Baker.

Baker: Thank you, Miller.

(He returns to his bakery, takes some flour from the bag, and begins to make bread.)

I am the Baker making the bread.

(The MOTHER, who has been dusting in the house, takes a basket and walks to the baker's shop.)

MOTHER: Please, Baker, may I have a loaf of brown bread for my children?

BAKER (banding ber a loaf): Yes. Fourpence, please!

MOTHER (putting the loaf in her basket and taking fourpence from her purse): Thank you, Baker. Good afternoon.

BAKER: Good afternoon.

(Mother walks home. Baker goes on baking bread. Father enters from the left with the three children.)

FATHER: Come along, children. We are nearly home.

Hello, Mother! May we have our tea, please?

MOTHER: Hello! Your tea is nearly ready.

(She sets the table. One of the children helps her. The loaf of brown bread is put on the table.)

CHILD: Where did you get that nice, brown loaf from, Mother?

MOTHER: I got it from the Baker.

BAKER (speaking from his shop): I got the flour from the Miller.

MILLER (speaking from bis mill): I got the corn from the Farmer.

THRASHER: I thrashed the corn.

REAPER (entering from the left): I cut the corn.

(Stands near the THRASHER.)

RAINDROPS (running in): We made the seeds grow.

(Stand at back of the stage.)

SUN (entering): I woke the seeds up.

(Stands near RAINDROPS.)

FARMER (enters from left): I sowed the seeds.

ALL TOGETHER: And that is how we get our brown bread.

Chapter III READING

THE ESSENTIALS OF A GOOD METHOD OF TEACHING READING

A good method of teaching reading should first develop in the child a correct attitude towards reading; he should be interested in reading, he should want to learn to read, he should regard reading as a thought getting process. Further, a good method of teaching reading should help the child to acquire those habits and skills which are fundamental to good oral and silent reading, namely, reading by the thought unit, accurate and speedy word recognition, proper eye movements, a wide recognition span.

CREATING AN INTEREST IN READING

Before any reading lessons are given, it is important that the child has a real desire to learn to read. If he comes from a better-class home he is probably interested in reading before he comes to school. At home he has been provided with attractive picture-books. Stories have been read or told to him by his parents or friends. He has been given help and encouragement in finding out the meaning of words under pictures in his story-books. He sees his mother and father reading books, magazines, newspapers. He hears correct speech and accurate pronunciation. He has many experiences which may not have any direct connection with reading, but which result in the enlarging of his ideas and the gaining of a more extensive vocabulary.

The child from the poor home seldom has much interest in

reading. It is all the more important that the school provides such children with a variety of experience and activities which will interest them in reading. Discussions, speechtraining, stories, poetry, singing, help the child to acquire a wealth of ideas and a good vocabulary.

Interest in reading develops in a variety of ways. On one occasion the floor of a classroom was being repaired. A workman chalked on the door, "Danger, do not enter." The children in the adjoining room were eager to know what the words said. They asked if they could have something on their door, and decided that, as they would like people to come in, they could not use the words the workmen had used. After some discussion, they arranged to have the notice, "Please knock at the door and walk in."

This interest in words was encouraged. A notice on the cupboard door read, "Please keep the cupboard tidy." When a child put his work away untidily, he was recalled, and the notice read to him. The shelves in the cupboard in which the band instruments were kept were labelled "Drums," "Cymbals," "Tambourines," "Bells," "Triangles," "Castanets." Inside the cupboard was a notice, "Please put the instruments on the right shelves." On windy days a card, "Please shut the door," was placed on the hall door, and another, "Please wipe your feet," was put up when it was raining. When Alan brought two love-birds, the children said, "Let's put a notice by the cage so that everybody will know who brought them."

A group of children who had a shop needed some means by which they could distinguish their goods. When the shop changed hands, the clay potatoes became apples or tunips according to the whim of the shopkeeper. Such transformations did not meet with the approval of the "housewives" who went to buy, so the children decided that the goods should be ticketed. The names of the various goods were printed on cards by the teacher, and it became part of the shopkeeper's duty to place these tickets on the different fruits, vegetables, or groceries each morning before opening the shop. Shopkeepers and buyers alike soon became familiar with these printed names.

Signs and posters were made by the children. They bore such slogans as, "Best butter sold here"; "Buy our homemade cakes"; "Eggs are cheap to-day"; "Oranges are good for you. We sell them"; "Eat fresh greens and be healthy." Notices, "Please have your money ready"; "Please count your change"; "Spend your pennies here," were pinned up in prominent positions.

In one room an interest in reading developed from the Health Week activities. One morning the teacher showed a picture of a boy eating an apple. Under the picture she had printed, "I like apples. Do you?" The children talked about the picture, and asked what the words underneath said. Next day she brought a picture of a child in a bath. The words under this picture were, "I bath every day."

Each day a new picture was brought. These were pinned up round the room, and were a source of great interest. Little groups often gathered round them and read the sentences. Some of the children brought pictures from home. These were bound together to make "A book of



' A READING CORNER"



health rules"; "A health picture-book"; "A book of healthy children."

One boy brought a pile of magazines. He said he had not had time to cut out all the pictures about health. A group set to work to help him cut them out and paste them in a book. The children made suggestions for sentences to be printed underneath the pictures. "Have you brushed your teeth to-day?" was printed under a picture of a toothbrush. A picture of beautifully manicured hands reminded the children, "Wash your hands before meals." A cut-out cow appeared above the somewhat curt order, "Drink milk."

The books were kept on a "Reading Table." Soon the table contained a varied assortment of books. One boy cut out pictures of flowers for a flower-book. Another collected pictures of toys and made "A Book of Toys." Some of the children's paintings and drawings were used for making books. The children told the teacher what the pictures represented, and she printed the sentences on slips of paper. The children copied the sentences into their books.

One teacher wished to give the children a party on her birthday. She cut out from coloured poster papers shapes representing jellies and cakes. She pasted the pictures on a sheet of paper, and underneath printed:

To-morrow is my birthday. I shall have a party. Will you come?

The children guessed from the picture that the notice was something about a party, but they wanted to know exactly

M.I.S.—F

what the words said. They were very much excited about the party, and, when a boy who was absent that morning returned to school in the afternoon, Dorothy led him up to the notice and carefully explained it to him.

This teacher extended the children's experience of words by means of other notices such as the following:

Mr. F—— has made the garage. He is bringing it this afternoon. We shall keep the motor-cars in it.

It is Empire Day to-morrow. Bring your flags. There will be singing in the hall. Ask your mother and father to come too.

There are two rabbits in Room D. We are going to have them in our room to morrow. Can you bring some cabbage leaves for them?

In one room interest in reading and writing developed mainly through "news." It was the custom to write on the board any important items of news given by the children. One day the head teacher saw written on the blackboard, "Timmy has been to see us this morning." On other occasions she saw other items of news about Timmy, but she never managed to see Timmy himself. She suggested that, as she would like to know what was happening, a copy of the news should be sent to her each morning. Two or three days later, the "news sheet" the children sent her read, "Timmy has come to see us again this morning." She

visited the room, and was introduced to Timmy, Peter's little black kitten.

The children continued to issue the daily news sheet, and the teacher found that they often drew or painted pictures illustrative of the news, so some of these pictures were used to illustrate the "newspaper."

The children asked if they could each have a newspaper of their own. Each day they copied the news on to a sheet of paper, made their own illustrations, and at the end of the week bound the sheets together.

In another class the making of a "film" was largely responsible for the interest in reading. Some of the children had painted pictures of Goldilocks and her adventures with the Three Bears. They decided to have a cinema, and to use these to make a "Three Bears Film." The pictures were arranged, in the order of the story, on a long roll of paper. A sentence was printed under each picture. When the film was shown, these sentences were read to the class by the teacher.

In such ways interest in reading develops. The child's earliest reading experiences in school are closely connected with his activities. He sees the news written on the board. He sees on the daily notice-board such messages as those about the garage and the rabbits. He sees notices reminding him to leave the dishes and saucepans clean when he has finished cooking and to wipe the measures dry when he has finished using them. He comes to regard printed matter as having some significance for him. When he looks at picture-books he wants to know what the words beneath the pictures say. Each fresh notice stimulates in him a desire to be able to read.

LEARNING TO READ

Once the children are interested in reading, they are given definite reading lessons. These lessons are generally based on a book in which the reading matter deals with experiences familiar to the children, or with stories or rhymes the children know.

The first reading lesson takes place before the children are actually given the book. If the book is about "The Three Bears," the children might act the story, and Father Bear, Mother Bear, and Baby Bear might wear tickets with their names on, or their names might be printed on the board. Another way would be for the children to have pictures of Father Bear, Mother Bear, and Baby Bear, and to place labels on them. Thus the children would learn the printed names of these three characters. Next the teacher would write on the blackboard the first three sentences in the book, which might read:

Here is Father Bear. Here is Mother Bear. Here is Baby Bear.

She would read each sentence to the children, and then ask if anyone could show her which sentence says, "Here is Mother Bear"; which one says, "Here is Father Bear"; which one says, "Here is Baby Bear." When the children are given the books they are able to read these sentences, because they have become familiar with them on the blackboard. In a similar way, in a later lesson, the teacher would

introduce the children to the next group of sentences in the book.

The first pages of a book might be about such a rhyme as "Here we go round the Mulberry Bush":

"This is the way we run to school,
Run to school,
Run to school,
This is the way we run to school,
So early in the morning."

As an introduction the children might play the games, singing the words given in the book. The teacher would then write the song on the board, and ask the children to sing it while she slides her pointer along under the lines. The children should soon be able to show her, for example, the phrase which says, "Run to school," and to point out the line which reads, "This is the way we run to school." If a child fails to recognise the sentences when he sees them in his book they are told to him.

In subsequent lessons such varied use should be made of the phrases already introduced to the children that they are able to recognise them in whatever context they appear. For instance, "The three bears" and "went for a walk" occur in the following sentences:

The three bears tasted their porridge. The three bears went for a walk. Goldilocks saw the three bears. The three bears found Goldilocks. Father Bear went for a walk.

Mother Bear went for a walk. Baby Bear went for a walk. They all went for a walk. They went for a walk in the wood.

The child is helped to recognise sentences and phrases by means of "flash" cards. The sentences and phrases are printed on cards. The sentence cards should all be the same length and width. Similarly, the phrase cards should be uniform in size. The printing should be clear, well spaced, and large enough to be read at some distance. A rubber-stamp printing set is useful for making such cards. The cards are best made of heavy paper or thin card, and should be large enough to allow a good margin round the print.

When giving drill with these flash cards they are held straight, and on a level with the children's eyes. The sentence or phrase is repeated on the back of the card, so that the teacher knows what is printed on the front without turning the card.

It is important that the children are not allowed to stumble over the phrases and sentences. Some children will require considerably more practice than others before they are able to recognise the groups of words.

Sentence and phrase flash cards help the child to develop a wide recognition span, because they lead him to form the habit of taking in word groups at a glance.

In order to read with ease the child must gain the power of rapid, accurate, word recognition. It is a common fault to proceed to word drill at too early a stage. If attention is

directed too soon to the separate words in the sentence the child may fail to regard the sentence as the unit of thought or to form the habit of grouping words when reading.

At first, attention is drawn to the words as parts of the sentence and not as isolated units. The child is asked to point to the word which says "bears," "wood," found," "porridge." Pointing to separate words in the sentence for the purpose of giving drill in word recognition should not be confused with the habit of allowing the child to point to each word in turn as the sentence is read. The latter should never be permitted, as this habit causes the eye-span to be limited to one word, and results in slow "word reading."

Flash-card drill with word cards helps quick recognition. The number of repetitions necessary varies with individual children. The easiest words to learn are generally those which are unusual in appearance, and those which call up a definite mental image. The child can distinguish between "ugly" and "goose," "apples" and "mamma," more easily than between shorter words which are more nearly alike, such as "pit" and "pot." Words such as "to," "by," "with," "this," and "was," which do not call up any definite image, are more difficult to learn. Such sentences as the following will be found useful for giving practice in recognising such words.

Where is the little red hen? Here is the little red hen. Where is the grain of wheat? Here is the grain of wheat. Who will go to sleep? Boy Blue will go to sleep. Baby will go to sleep. My dolly will go to sleep. This is my picture. That is your picture. This is my ball. That is your ball.

My top is blue.
Your top is red.
Her top is yellow.
His top is green.
Who has the blue top?
I have the blue top?
Who has the red top?
You have the red top.
Who has the yellow top?
She has the yellow top.
Who has the green top?
He has the green top?

In drill work attention is given to the special difficulties of the children. Some are common to all and are dealt with in class lessons, but individual difficulties receive individual attention.

Drill should never become unconscious, thoughtless repetition. It should be taken for short periods only so as to avoid fatigue. Its purpose should be to make new words a permanent part of the child's reading vocabulary.

At some point, training should be given which will provide the child with a method of attack on new and un-

familiar words. When the child has acquired a fairly large vocabulary of sight words, he begins to notice that there are similarities between some of them. Sometimes it is a likeness in sound which first attracts his attention, as in, "Hark, hark, the dogs do bark." It may be that he notices that certain words begin or end with the same letters, as, for example, "pretty," "petticoat," "poor," "polly," and "ball," "tall," "fall," or that the middle portion of one word is similar to that of another, as in "trees," "green," "seed," "geese."

Rhymes often attract the child to similarities in words. When the rhyme "Jack and Jill went up the hill" was printed on the board, Jane said, "I know which word says 'hill." She pointed to the word, and when asked how she knew it, replied, "Because it's like 'Jill,' and I know the word 'Jill." This interested the class, and another child pointed out immediately that "Jack" and "Jill" both start with the same letter.

Further discoveries were made with other rhymes, and the children began to take a great interest in finding out how many words in their news- and story-books had similar parts. The teacher listed the words on the board as they were discovered, the children telling her the list under which to enter each word.

The children make "word" books. In these they list words according to similarities between them, for instance, words beginning with "wh," "ch," "br"; words ending in "1ght," "tion," "est"; words containing "ou," ow," oi," oy."

SILENT READING

It is natural for the child to read aloud at first, for the printed word is closely associated in his mind with the audible word. As he becomes more accustomed to the printed form of the words, he stops saying them aloud, but continues to make lip movements. Although the child need not be prevented from making lip movements at first, he should not be allowed to continue making them too long, or his rate of reading will be slow.

Silent reading can be encouraged almost from the first. The child is reading silently when he recognises the sentence "Walk to the door," and performs the action without saying the words. It is advisable in the early stages for the teacher to ask the child to read the words aloud after performing the action, in order that she may be sure that the child has read them accurately.

Games and exercises with flash cards are useful in developing the habit of silent reading. The aim is to get rapid and accurate comprehension, therefore all words used in these exercises should be present in the child's reading vocabulary. The cards are exposed for a few seconds only. This short exposure helps to prevent the child from making unnecessary eye movements, at the same time it helps to increase his recognition span.

SILENT READING EXERCISES

Suggestions for individual and group exercises are given below. Some of these require action responses, others oral responses.

FOLLOWING DIRECTIONS

Directions are printed on flash cards. The children may be divided into teams, and points scored for the accurate interpretation of the words on the flash cards.

Such commands as the following are suitable for individual response:

Walk to the table.

Hop round the room.

Bring me your book.

Put your hand on your head.

Show me something red.

Bring your book and read to me.

Get a piece of chalk and write your name on the board.

Place your right hand on your hip and your left hand on the table.

The whole class may perform such actions as the following:

Take out your books.
Get your hats and coats.
Stand by your desks.
Run into the hall and sit down.

FINDING PICTURES

Pictures of toys, animals, food, clothing, etc., are cut from magazines, mounted on cards, and placed in a box. Sentences are printed on flash cards:

Get the blue top.
Bring the drum to me.
Take the apple to Mary.
Put the loaf on the table.
Get the doll's pram.

The leader flashes a card, and the child whose name is called finds the picture in the box and performs the action. Points can be scored for the teams, or the children may be given an equal number of turns and allowed to keep the pictures. At the end of the game the children count their pictures.

QUESTION GAME

Short, clear questions are printed on flash cards. The leader calls the name of the child who is to reply. The children may be divided into groups, and a child from each group called upon in turn. It makes the game more interesting if the questions are based upon different subjects:

Health Questions

Do you open your windows at night?
Did you clean your teeth this morning?
Did you go to bed early?
Have you a handkerchief?
Do you wash your hands before you eat?

Personal History Questions

What is your name?
How old are you?
Where do you live?
How many sisters have you?

Personal Questions

What colour is your hair?
Do you like school?
Can you read?
What game do you like best?
Who is your friend?

Yes and No Questions

Do rabbits have wings?
Can you sing?
Do dogs whistle?
Can a pig cackle?
Is water dry?
Do cats like fish?

Story Questions

Why did Cinderella cry?
Who came to see her?
Did she go to the ball?
With whom did she dance?
Who lost a glass slipper?
Who found the slipper?
Did the slipper fit Cinderella?

This game may be played in another way. Two sets of cards are prepared, one set having the questions on them and the other the answers. The answer cards are given to the children. The leader flashes a question card, and the child who has the answer card holds it up and then reads it aloud.

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The cards may ask such questions as:

Who sells butter?

Who sells fruit?

What gives us milk?

How many feet have you?

The dairyman.

The fluiterer.

The cow.

Two.

One.

WRITING MISSING WORDS

Several sentences, each of which has a word missing, are printed on cards. The children take a card and write the missing words.

At night we go to —.

In the morning we go to —.

I eat my pudding with a —.

I clean my teeth with my —.

A dog has four —.

A bird has two —.

An omnibus has six —.

A watch has a face and two —.

A boy has two legs and two —.

A man who sells fruit is called a —.

A man who sells groceries is called a —.

A man who makes bread is called a —.

A man who makes shoes is called a —.

Finding the Odd Word

The teacher writes lists of words on cards or on the board. Each list contains about six words which are in relationship to each other and one or two words which are not. The children write the words which are not in relationship to the others. They may score for teams or individually.

Fruits.—Orange, apple, banana, pear, ball, lemon, grape, hammer, fig.

Toys.—Ball, skipping-rope, loaf, bat, doll's-house, nest, kite.

People.—Grocer, postman, baker, sweep, onion, milkman, fruiterer.

Vehicles.—Omnibus, carriage, frock, tramcar, pony cart, cow, train.

STORY PUZZLE

Simple stories or nuisery rhymes are printed on cards. A list of questions bearing on these, together with three or four possible answers to each, is printed underneath. The child reads the exercise silently, then selects the most suitable answer from the list.

If the stories and questions are printed on separate cards, the child can be allowed a given time in which to read the story. The story card is then turned face down, or given up, and the child takes the answer card and selects the appropriate answers without reference to the story.

Peter's father was a sailor.

He went to sea in a large ship.

When he came home he told Peter many stories about sailors.

Peter danced and sang for his father.

His father said, "Well done."

Peter was very happy.

Questions:

- What was Peter's father?
 Soldier. Sailor. Baker. Farmer.
- 2. Where did his father go?
 Town. Country. Sea. Workshop.
- 3. Of whom did his father tell him stories?
 Negroes. Passengers. Cannibals. Sailors. Pirates.
- 4. What did Peter do for his father?

 Danced. Played. Read. Shouted. Ran. Sang.
- 5. What did his father say?
 "Good boy." "Bravo." "Well done." "Thank
 you."
- 6. How did Peter feel?
 Tired. Pleased. Miserable. Cross. Happy.

CHOOSING ANSWERS TO RIDDLES

This game is of the puzzle type. Three or four pictures are placed in an envelope, together with a riddle describing one of them. The child must select the picture which supplies the answer to the riddle. Selection is made more difficult by placing four riddles in the envelope. Each envelope should be numbered, and the pictures and riddles contained therein numbered to correspond.

Riddles

I am round.
I am very bright.
You see me in the daytime.
I am in the sky.

I can fly.

You see me in winter.

I have a red breast.

I have four wheels.

A baby rides in me.

I have a shade.

I am red.

I stand at the street corner.

I have a wide mouth.

People put letters in my mouth.

Pictures

Sun. Robin. Perambulator. Pillar-box.

READING, HANDWORK CARDS

The children read the cards, and then carry out the instructions.

Draw a little girl.

Colour her frock blue.

Colour her shoes black.

Colour her hair brown.

Draw her doll.

Draw a red engine.

Cut out the engine.

Draw a man.

Colour the man as you wish.

Cut out the man.

Paste him by the engine.

M.I.S.-G

Draw Simple Simon.

Draw the Pieman with his pies.

Cut out Simple Simon and the Pieman.

Draw a street.

Paste Simple Simon and the Pieman in the street.

I have two long ears.

I have a tail.

My home is in the ground.

I hop about in the fields.

What am I?

Draw me.

I am green.

I have long arms.

I have shining tinsel on my arms.

I hold toys and presents.

You see me in the month of December.

Everybody likes me.

Do you know what I am?

Draw me in a red pot.

Draw some boys and girls near me.

ORAL READING

The passages read aloud by the children are prepared silently beforehand. The children are encouraged to ask for help if they do not know the meaning or the correct pronunciation of a word. Even though they have been told new and difficult words when preparing a passage or story, the children sometimes stumble over them when reading aloud. By supplying the word the teacher preserves the interest and continuity of thought. Special attention is given in the drill periods to the words which present difficulty.

Emphasis is placed on the importance of a clear, distinct, pleasing, and well-modulated voice. Helpful discussion and kindly criticism stimulate the children to make greater efforts to improve their oral reading. Indistinct oral reading frequently results from a lack of self-confidence. Language training and dramatic work help the children to gain greater self-confidence.

The reading of simple plays is an interesting way of combining silent and oral reading. Different groups prepare plays, and then read them to the other groups. Some indistinct readers are able to read clearly and audibly when they are interested in the part they are taking.

Another reason which sometimes explains poor oral reading is that the content of the reading material is too difficult. The child cannot be expected to read with fluency and expression if he does not know what the text means. Expression is very largely the result of comprehension.

READING MATERIALS

In recent years a great deal of attention has been centred on the physical aspects of reading. It has been discovered that the rate of progress in reading depends to a large extent on eye habits. Eye movements and eye-strain have been studied with a view to finding out what constitutes hygienic reading material.

For young children the type should be fairly large and clearly printed. In the earliest reading material one sentence only should be printed on a line. The text should not be broken up by illustrations in such a way as to prevent the

correct grouping of words when reading. Pictures are generally considered better placed at the top of the page. These should be simple, good, and distinctly illustrative of the text. The books should be bound in such a way that they will open flat.

When the children begin to use a reading-book, they often find considerable difficulty in following the lines of print, and in concentrating the attention on one line at a time. It is advisable at this stage to provide each child with a slip of paper, which he can place under the sentence to be read. The use of these strips should be discontinued when the child begins to use reading material in which the sentences are incomplete at the end of the line.

The first reading-books should be fairly short. It is better for the child to read several books which are parallel in difficulty than to spend too long on one book. The child likes to feel that he is getting on, and a new book is a great incentive to further effort.

The content of the first books should be connected with the child's interests. They may contain stories with which he is familiar, introduce the well-known heroes of nursery rhymes, or deal with things which are bound up with the child's everyday life. As the child develops, the content of the books he reads should widen his interests and ideas.

THE CLASS LIBRARY

The class libraries contain books of various types, such as fairy tales, stories of travel and adventure, hero tales, stories of life in other lands, stories of primitive times, animal tales,

fables, nursery stories and rhymes, and books of poems. In one class, the children started a library by bringing suitable books from home and lending them for the term.

The children choose their own librarian and make their own library rules. One class decided that their librarian must possess certain qualifications. A list of these was drawn up and pinned on the notice-board.

THINGS THE LIBRARIAN MUST BE ABLE TO DO

He must read well.

He must be able to write notices.

He must find the book you want quickly.

He must keep the library tidy.

Groups of children gathered together during the day and eagerly discussed the boy or girl they wanted for librarian. Two or three children were overheard canvassing for their friends.

"You vote for Alice," said one; "she can read books quicker than anybody else, and she writes nicely, too."

"Yes, I know," said Micky, "but she doesn't keep her locker tidy, does she? I'm going to vote for Stanley. He reads all right, and he keeps his things tidy as well."

The teacher acted as chairman when the nominations were made. The names of the nominees were written on the board and voting-papers were distributed. Each child wrote down the name of the person he wanted for librarian. The papers were then collected, sorted, and counted, and the number of votes gained by each nominee was recorded on the

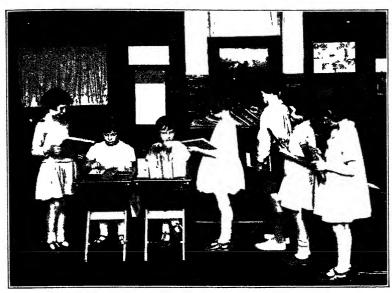
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board. It was evident that many of the children shared Micky's views, for Stanley was elected by a large majority.

RECORDS OF PROGRESS

Children vary in the time they take to learn to read, therefore a record is kept of each child's progress. These records show the stage each child has reached. The teacher refers to them when grouping the children for reading lessons.

Achievement tests are given from time to time. Each child's score is entered on his record card. Some of the older children keep their own records of the results of the tests. This helps to make them keen to improve their scores.



THE CHILDREN MAKE THEIR OWN LIBRARY RILES



TRAINING IN ART-TWO DIFFERENT ASPECTS

Chapter IV

NUMBER

NUMBER, for the young child, should be experience. He weighs the flour and sugar for the cake, groceries in the shop, parcels in the post office, the amount of silver paper collected during the week. He uses money to buy his train ticket. butter and eggs at the dairy, a ticket for the fair. He counts the number of bats, balls, or skipping ropes taken into the playground, and re-counts them to see that the right number is brought back. He counts the number of boys and girls present in the class. He "serves" tea for 6, and puts out 6 plates, 6 cups, 6 saucers, 6 spoons. He arranges his tin soldiers in is, 2s, 3s, 4s. He measures the meal for the rabbits' food, the water for the tank in which he sails his boats. He adjusts the hands of the toy clock to indicate the time the shop re-opens, the time at which the train starts. He measures shadows in the playground, the length of material necessary for a cook's apron, the length of wood required for the counter of the post office, the distance between one station and another.

Through these experiences the child becomes conscious of number facts. When he knocks down 5 skittles and then 4 more, he learns that 5+4=9. When he spends 8d. out of 1s. he learns that 12-8=4. He discovers that he can pour 4 gills of water into the pint measure, and learns that 4 gills = 1 pint. He cuts a yard of ribbon into 1-foot pieces, and learns that there are 3 feet in 1 yard.

As the number of experiences through which the child

learns such facts is increased, these facts become established in his mind. Short periods of brisk drill by means of games help him to recall these facts with increasing rapidity.

The following descriptions of various activities indicate some of the ways in which the children have gained a knowledge of number.

One class of children who were very much interested in playing "mothers and fathers," transformed their classroom into a square of houses. In one corner lived "Mrs. Jones." Although her house was nothing more than a large box furnished with bricks, odd pieces of dolls' furniture and some cups and saucers, "Mrs. Jones" and her family lived a very busy life in this house on the corner.

Some "mothers" were proud of the fact that they had an upstairs and a downstairs in their houses. Downstairs was under one table, and upstairs was under a smaller table placed on the top of the larger one. "Mrs. Smith," and one or two of her neighbours, had more palatial residences. Their houses were orange-boxes.

It was essential to every housewife that she possessed a few cooking utensils and cups and saucers; she had to prepare meals for "father" and her family, and serve tea to her visitors.

The children counted that there were 24 houses in the room. Mary discovered that her house was number 5, and Joan that hers was number 17. Sybil wanted the number of her house on the door, so the teacher wrote the numbers 1–24 on the board, and, by pointing to each figure in turn as she counted, Sybil discovered which was figure 9. She made a figure 9 on a piece of card and fastened this on the

door of her house. The other children also made number cards for their houses.

One morning Billy came to school with a postman's hat and bag. He went round knocking at everybody's house. As he had no letters in his bag, the teacher gave him some cards and envelopes numbered 1–24. He delivered these by matching the numbers on the cards and envelopes with the numbers on the houses. This game of "Postman" became very popular, and there were several deliveries every day. Some of the numbers on the houses had to be re-done, because the postman said the figures were so badly made that he could not tell what they were meant to be.

Shops soon became necessary in this community. One boy turned his house into a grocer's shop, another turned his into a greengrocer's. One girl opened a dairy, another started an artificial flower shop.

The dairy stocked butter, eggs, and cheese made from clay, and supplied a cupful of water for a pint of milk. The grocer had scales on which he weighed out sand. The sand represented rice, sugar, flour, or any other similar household commodity required by his customers. His weights were lumps of clay or convenient bricks, and the amounts given for a pound varied from time to time according to the weight the shopkeeper happened to select. He sold differently shaped bricks as anything from $\frac{1}{2}$ lb. of tea to 2 oz. of lard.

Bricks were also made use of by the greengrocer for potatoes, turnips, onions. Fir cones were brussels sprouts, pebbles were cherries. Other fruits and vegetables were made from clay. Here again, the quantities given for a

certain weight varied. One housewife was given two apples for a pound, while another received eight.

The children asked for money to shop with, and were given a supply of halfpennies, pennies, sixpences, and shillings. The shopkeepers charged any price they liked for their goods. Artificial roses from the flower shop were 6d. a bunch to one person, and 3d. a bunch to another. Oranges were 3 a penny one minute, and 1d. each the next.

When the first novelty of shopping had worn off, the

When the first novelty of shopping had worn off, the shoppers began to compare the amounts they had received for their money. Matilda found that she had been given 3 onions for a pound, while Cecily had been given 12. Alfred brought home a small cupful of water for a pint of milk, whereas Bernard had managed to obtain a large cupful. Many arguments between shopkeepers and customers resulted.

The matter was discussed and, as a result, the teacher introduced the standardised weights. She showed the children the 1.1b., ½.1b., ½.1b. weights, and told them the name of each weight. She weighed different quantities of sand, pointing out that the sand and weight must balance.

Another day the children were given sets of gill, ½-pint, pint, quart measures. The teacher told them the name of each measure. She pointed out that in order to measure accurately, the measures should be filled to the top. The children were supplied with a funnel, a collection of bottles, jars, and cartons into which they could pour the water they measured out.

By the end of the term the interest in shopping had so outgrown the interest in playing house that several of the houses had been abandoned. Many of the things the children were using for their play had to be packed away for the holidays, and, when the new term started, the children discussed whether they should continue to have their shops. They decided that instead of the small shops they would now have one big shop.

A set of shelves was fixed up on the walls, and two tables were placed in front of the shelves to form the counter. Some of the children brought packets of rice, sugar, tea, macaroni, raisins, currants. Others brought empty cocoa, coffee, mustard, and treacle tins. Jars and bottles which had contained jam, marmalade, pickles, vinegar, milk, meat extract, also empty cheese boxes, packets of custard powder, baking powder, cake mixture, were brought to stock the shop.

Each day, as things were brought, a list was put up on the notice-board, e.g.:

WEDNESDAY

Joan brought 2 cocoa tins.
Peter brought 6 cheese boxes.
Mary brought 8 jars of jam.
Alfred brought 8 packets of raisins.

Cecily brought 4 mustard tins and 1 lb. of rice.

Bernard brought 2 packets of jelly.
Sybil brought 3 tins of polish.
Matilda brought 1 treacle tin.

By the end of the week so many things had been brought that, the children decided to open the new shop. Before doing so they took stock of the goods brought. Cecily had brought 4 mustard tins, John 2, Walter 3, and Edwin 6. The teacher wrote on the board the number of tins brought

- A MODERN INFANT SCHOOL

by each child. The tins were counted, and the total number was written on the board.

Mustard Tins 4 2

6

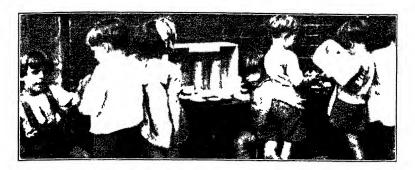
15

These goods were then arranged on the shelves. Stock was taken of the other goods in the same way.

The children thought that the empty jam-jars should be covered and labelled. When this had been done the list was put up on the board.

		Jam			
Apricot		•		•	3 jars.
Raspberry		•		•	3 jars.
Plum .	•	•		•	3 jars.
Strawberry		•		•	3 jars.
Black curran	t	•	•	•	2 jars.
					Torontonia de la constanta de
					14

When the children had taken stock they found that they needed more sugar, rice, and flour. They said they would weigh silver sand for sugar, coarse sand for rice, and sawdust for flour. Scales, paper bags, scoops, and large tins containing sand, sawdust, peas, beans, were now placed in the shop.





SHOPPING



LUNCH TIME

The teacher suggested that price lists should be made. She wrote the names of the goods and the prices decided upon on the blackboard. These price lists were then printed out on large cards and fixed upon the wall.

Polish		2d.	and	4d.	Jam .		6 d.
Mustard	•		•	2d.	Honey .		3d.
Cocoa		3 d.	and	6d.	Baby food		9d.
Raisins	•		•	4d.	Sugar .	•	2d. a lb.
Custard :	powder	•		2d.	Flour .		3 <i>d</i> . a lb.
Cheese	•	•		2d.	Macaroni.		4d. a lb.
Oats	•	•		8 <i>d</i> .	Rice .		4d. a lb.
Tea.	•	•	•	7đ.	Beans .	•	2d. a lb.
Jelly	•	•	•	2d.	Peas .	•	3 <i>d</i> . a lb.
Pepper	•	•	•	1d.	Lentils .	•	3 <i>d</i> . a lb.

The children had already learned to count and to recognise figures, and had had some experience with money. It now became necessary for them to be able to read the prices on the various price lists and also to know the value of the different coins. The teacher made price tickets, and the children were given practice in reading the prices and in placing the right amount of money on the tickets. When the children were able to put out in pennies the amount stated on the price ticket, they were given practice in putting out different groups of coins for the various amounts. The children were shown how, for instance, they could put out is in different ways:

²⁻ sixpences.

¹ sixpence and 6 pennies.

¹ sixpence, 3 pennies, and 6 halfpennies.

I sixpence and 12 halfpennies, etc.

The children played many games with these price tickets. Sometimes one child had the box of money and the other children handed him tickets. In return for a ticket he had to pay out the amount stated on the ticket. This game of "bank," as the children called it, was very popular, and it became the custom for the children who were shopping to go to the "bank" to get their money, and for the shopkeeper to pay his takings into the "bank" when he closed his shop.

The shop was often overcrowded, owing to the large number of children who wanted to buy at the same time, so the teacher divided the children into groups for shopping. Each morning and afternoon she put up a list on the noticeboard stating which children might shop, and who was to be the shopkeeper for the session.

After a few days the children decided that the shopkeeper should have an assistant to do the weighing for him. The scales and tins were arranged on a separate table near the shop, and when a customer wanted goods which required weighing he was referred to this department.

In spite of this new arrangement the children were often kept waiting, because the shopkeepers were unable to serve and give change quickly enough. This difficulty led to the institution of a cashier. The shopkeeper now gave the customer a ticket for each article bought, and the tickets, together with the money, were handed to the cashier by the customers.

Some of the children who were not yet able to give change accurately were given extra practice. Several children pretended to be cashiers. The other children handed them

tickets on which were printed amounts less than 6d. All these amounts were paid with suxpences, and the cashiers had to give the change. After some practice in giving change from 6d., the children were given tickets for amounts less than 1s., and shillings to pay with.

Sometimes the children in this group were each given a supply of pennies and halfpennies, and when the teacher said, "I spent threepence. How much change should I have from sixpence?" the children put out the change, using pennies, or halfpennies, or both. Practice in giving change from 15. was given in the same way.

So far the children had bought one article at a time, and when they had paid the cashier for this, they made other purchases, and paid the cashier for each article separately. After the children had had considerable experience of shopping and giving change, the teacher suggested that each customer should buy two articles at a time, and that the shopkeeper should make out a bill for each customer. She showed the children how to make bills.

Sugar	. 2d.	Cocoa	. 3 <i>d</i> .	Polish	. 4d.
Mustard	. 2d.	Cheese	. 2 <i>d</i> .	Jam	. 6d.
	<u>4d.</u>		$\overline{5d}$.		rod.

Sets of cards on which bills were written out gave the children more practice in adding up bills. Some of the children put out the money by each item and counted the pennies to find the total.

All the children were given drill work to help them

·		A	M	OD	ΕR	N	INE	AI	NT SCHOOL
									The following addition
combi	nati	ons	we	re p	rini	ea		on	flash cards:
1	2	3	4	5	6	7	8	9	
0	0	0	0	0	0	0	0	0	
-		_	-				_	_	
1	2	3	4	5	6	7	8	9	
1	1	I	1	I	1	1	I	I	
*****	~	_	_		-	_	8	_	
	2 2	3 2	4 2	5 2	6 2	7 2	2	9 2	
		<i>4</i>	<i>-</i>	_	<i>-</i> 4	_	_	_	
		3	4	5	6	7	8	9	
		3	3	3	3	3	3	3	
		_	_	_	_	_	_	_	•
			4	5	6	7	8	9	
			4	4	4	4	4	4	
				-	_	-		_	
				5	б	7	8	9	
				5	5	5	5	5	
					_	-	_		
					6	7	8	9	
					6	б	6	6	
								-	
						7	8	9	
						7	7	7	
						-	_		
							8	9	ı
							8	8	
								_	*****
								9	
								9	
							771	, –	
							112	4	

and the reverse, for example:

I

0		0	0	0	0	0	0
2 -	3	4	5	6	7	8	
-	-	_	-	-	_	_	-
1	I	I	I	I	I	I	1
2	3	4	5	б	7		9
	-	-	-	_	-	-	
	2	2	2	2	2	2	2
	3	4	5	6	7	8	9
	_	-	-	-	-	-	_
•		3	3	3	3	3	3
		4	5	6	7	8	9
		_	_		-		-

On one set of cards the numbers were printed out as above, and on another set they were printed in equation form. One side of each card showed the numbers to be added and the other side showed the complete fact.

Front	Back ·	Front	Back
4 .	4	4 + 3	4 + 3 = 7
3	3		
_			
	7		

If the child hesitated over the answer the card was turned over so that he saw the complete statement, the aim at this stage being to fix the number fact in the child's mind and to eliminate the need for counting.

M.I.S.-H

A MODERN INFANT SCHOOL

Şets of cards on which were printed groups of different combinations were provided, e.g.:

$$3 I 2 0 2 4 3 + 5 =$$
 $2 0 I 3 2 3 4 + 0 =$
 $- - - - -$
 $1 + 2 =$

When using these cards the children wrote the answers on a slip of paper, which was placed either under or at the side of the combinations.

The items on the bills sometimes added up to more than 12 pennies. The teacher made a chart on which the figures 1 to 100 were printed out in rows of 10. Every twelfth figure was marked in red. She showed the children how to use this chart to find out what the total of their bills represented in shillings and pence.

The children liked the idea of making out bills. The shoppers were now allowed to buy more than two articles at a time. The total amount was shown on the bill in pence, and also in shillings and pence.

Raisins .		•	4d.
Oats			8 <i>d</i> .
Tea	•	•	7d.
1 lb. of beans	•	•	2d.
			$\overline{21d.} = 1s. 9d.$
2 lb. of sugar	•		6d.
1 lb. of rice.			4d.
3 eggs .			6d.
			$\overline{16d.} = 1s. 4d.$

Meanwhile, difficulties had arisen in the weighing out department. The price lists showed the price for 1 lb. of goods, and the amounts charged for such weights as $\frac{1}{4}$ lb., $\frac{1}{2}$ lb., $\frac{3}{4}$ lb., 3 lb. had varied. The teacher helped the class to work out the cost of different quantities. One pound of the coarse sand which represented rice was weighed out and put in a bag, and 4d. was put by it. Half a pound was weighed out from the 1-lb. packet. The children put the remainder of the bag of sand on the scales, and found that this also weighed $\frac{1}{2}$ lb. Two pennies (half the cost of 1 lb.) were then placed on each $\frac{1}{2}$ -lb. packet.

A $\frac{1}{4}$ lb. of sand was then weighed from one of the $\frac{1}{2}$ -lb. packets. The children found that the remainder of the $\frac{1}{2}$ -lb. packet also weighed $\frac{1}{4}$ lb., and when the two $\frac{1}{4}$ -lb. packets were placed on the scales, they balanced the $\frac{1}{2}$ -lb. packet. The children saw that each $\frac{1}{4}$ -lb. packet would cost 1d.

The teacher made a note of these discoveries on the board.

	Rice
ı lb.	1 lb. costs 4d.
$\frac{1}{2}$ lb. $+\frac{1}{2}$ lb.	$\frac{1}{2}$ lb. costs 2d.
$\frac{7}{4}$ lb. $+\frac{1}{4}$ lb. $+\frac{1}{4}$ lb. $+\frac{1}{4}$ lb.	$\frac{1}{4}$ lb. costs 1d.

When the cost of $\frac{1}{2}$ lb. of peas was worked out, the children discovered that in sharing the three pennies between the two $\frac{1}{2}$ lb. packets, they had 1d. on each packet and 1d. left over, so this penny was changed for two halfpennies, one of which was placed on each $\frac{1}{2}$ lb. packet. In sharing the $\frac{1}{2}$ d. to find the cost of $\frac{1}{4}$ lb. the children had to change the penny into halfpennies and the halfpenny into farthings.

Peas

1 lb. costs 3d.

 $\frac{1}{2}$ lb. costs $1\frac{1}{2}d$.

 $\frac{1}{4}$ lb. costs $\frac{3}{4}d$.

The price of more than 1 lb. of goods was also worked out.

1 lb. of peas costs 3d.

2 lb. of peas cost 6d.

3 lb. of peas cost 9d.

4 lb. of peas cost 1s.

The children had calculated the cost of more than 1 lb. of goods by means of addition. They were now introduced to multiplication as a shortened form of addition. The children built up the twice-times table by working out the cost of eggs.

1 egg at $2d$. = $2d$.	•	•		$I \times 2 =$	2
2 eggs at $2d = 4d$.	•	•	•	$2 \times 2 =$	4
3 eggs at $2d = 6d$.	•			$3 \times 2 =$	6
4 eggs at $2d$. = $8d$.		•		$4 \times 2 =$	8
etc.				,	

Other tables were worked out, printed on charts by the teacher, and put up for reference. Practice cards, games, and flash card drill were used to help the children to recall the multiplication facts quickly.

A remark made by one of the children, "Mother said that at the shop in the market you can get sugar cheaper next Monday," gave the children the idea of having bargain prices. They decided to have a bargain day, and to have





I RABBIT HAS 2 EARS

2 RABBITS HAVE 4 EARS

NUMBER MUST BE EXPERIENCE

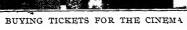




WE MEASURED THE PAPER FOR OUR CAPS AND APRONS

HOW MUCH DOES IT WEIGH?







WHAT NUMBER IS YOUR TICKET, PLEASE?

special prices for some of the goods. A notice advertising the bargains was put up in the shop.

TO-DAY'S BARGAINS 8 tins of polish at $1\frac{1}{2}d$. a tin. 9 pots of honey at $2\frac{1}{2}d$. a pot. 12 jars of marmalade at 8d. a jar. 10 lb. of sugar at $3\frac{1}{2}d$. for 2 lb. 7 bottles of meat extract 5d. each.

After the sale the teacher suggested that the children should take stock. The original stock of each kind of article was written on the board. First the children who had bought tins of polish were asked to bring these out and put them on the table. It was found that 7 had been sold, and that there was 1 left in the shop. The teacher wrote on the board:

Polish
8
— 7
I

and explained the meaning of the minus sign. The children took stock of the other goods.

Honey	Marmalade	Sugar	Meat extract
9	12	10	7
— 7	— 6	- 4	— 3
	-		errorante.
2	6	6	4
*********	-		-

They had other bargain days, stock being taken in the same way as before. Sometimes the children had a general sale and reduced the prices of all the goods. At other times all the goods priced at 6d. or over were reduced by 1d., or 2d. discount was allowed on all bills which came to 1s. or more.

The children had other experience in subtraction. For instance, when they scored points for games, flash/card drill or tests, they subtracted their scores from the total number of marks possible. After the children had had a good deal of experience in subtraction the teacher made practice cards and flash cards to give drill on the following:

The equation form was used for one set of flash cards and also for some of the practice cards. As was the case in the addition and multiplication flash cards, the subtraction flash cards had the complete fact printed on the back. If the child hesitated when giving the answer, the card was turned.

The taking of stock after bargain days gradually involved more difficult subtraction. For instance, 4 dozen eggs had been advertised at 1d. each, and 29 of these had been sold.

48 — 29

The teacher showed the children how to work out this sum by means of the decomposition method. Later they were shown the equal addition method as a quicker way of doing subtraction. The children were taught to check all answers to subtraction sums by adding the answer and the subtrahend together to see if the total corresponded to the minuend.

The children kept account books. Each child was allowed a certain amount of money in the "bank" at the beginning of the week. He wrote this amount down in his account book. Each time he shopped he subtracted the amount he spent from the amount he had in the "bank." At first the amount the children were allowed and the amounts they spent were both entered in their account books in pence. The money chart was used for reference when necessary. Later on the amounts were written down and the accounts made out in shillings and pence.

Monday .
$$-\frac{s}{1}$$
 $\frac{d}{9}$

Tuesday . $-\frac{3}{1}$ $\frac{3}{1}$ left.

Friday . $-\frac{1}{10\frac{1}{2}}$ $\frac{1}{0}$ left.

Doris		s. d.
Tuesday .	*****	5 o in the "bank." 2 3
Wednesday .	**************************************	2 9 left. I I
Thursday .	Advention	1 8 left. 1 4
		0 4 left.

Train games are very interesting to children, and involve much number. Some of these games develop from the children's early dramatic play with the large building blocks, engines, and trucks. The blocks were used to make bridges, tunnels, and platforms. A table would represent one station, a row of chairs another, the end of the hall the terminus. Sometimes the trucks were filled with bricks, which were taken from one station to another. At other times all the available dolls were packed into "an excursion train to the seaside."

These games led to the making of a model of a station in one classroom. The children brought cardboard boxes, cigarette boxes, cotton reels, and with these they erected a station, complete with platforms, booking offices, restaurants, signal boxes, and passenger bridges.

The children had books in which they wrote notes. When they began making the station they wrote:

- · We have started making our station. We are making:
 - 4 platforms.
 - I booking office.
 - I station-master's office.
 - I left-luggage office.
 - 2 porters' rooms.
 - 3 passenger bridges.
 - 8 waiting/rooms.
 - 2 tearooms.
 - 2 bookstalls.

Matchboxes, other small boxes, corks, and odd pieces of cardboard, were used to make the trains. Red and green enamel helped to give a more realistic touch to the models. When these were ready the children wrote in their books:

We have made:	We need:
6 engines.	ı stati
6 guards' vans.	2 boo
4 goods trucks.	8 port
10 carriages.	2 tick
4 signal boxes.	1 bag
	6 engi
	_

1 station/master.2 booking clerks.8 porters.2 ticket collectors.

- 2 ticket collectors 1 baggage clerk.
- 6 engine drivers.
- 6 guards. 4 newsboys.
- 2 waitresses.
- Passengers.

Some of the models of people were made by pasting magazine pictures on cardboard and cutting them out. A few were made from plasticene. The discovery by some of the children that the local store stocked suitable small lead

figures resulted in many of these being brought to the school and used in the station.

One of the children brought a railway time-table to school. This gave the children the idea of making time-tables for their trains. A large clock face was hung up over the station. The hands of the clock were adjusted to show the time at which the next train left the station. The teacher brought some large railway posters and various booklets advertising holiday resorts. The children arranged excursions for their toy trains and made notices giving the prices of the tickets, the times the trains started, and the numbers of the departure platforms. Sometimes the children pretended that they themselves were going on the trains. 'They arranged their chairs in a long line, shut their eyes, and pretended they were in the train. While their eyes were closed the teacher put up some of the railway posters with pictures of trees, fields and cows, and when the children opened their eyes they pretended they had arrived in the country.

These imaginary train journeys gave the teacher the idea of arranging excursions to other rooms. One day she put this notice on the board:

Market trains leave to-day at:

10.0 a.m.

10.15 a.m.

10.30 a.m.

Return fare, 5d.

Everybody was anxious to go on this trip. The children worked out how many passengers could go by each train. They found that when the 44 children in the class were

arranged in three groups there were 15 in two of the groups and 14 in the third, so one little girl said she would take her dolly to make 15 in each group.

Chairs were used to make the train. One of the large toy engines was placed in front, and a brick box at the end represented the guard's van. Two of the children who were going on a later train acted as engine driver and guard, and two more as booking-office clerks. Each child was given 6d. After paying 5d. at the booking-office for his ticket he had 1d. left to spend. When the children came to the end of the imaginary journey they proceeded to the "market," a classroom in which the children had some shops.

Another day the teacher arranged an excursion to a room where the children had made and collected a large variety of number games. These games included skittles, hoop/la, hop/scotch, and various ring games. This class turned their room into a "Fair" for the afternoon of the excursion.

The trip to the "Fair" was advertised by a notice which read:

Special Excursions to the Fair

Trains leave at:

2.0 p.m.

2.30 p.m.

3.0 p.m.

Single ticket, 2d.

The children had been given 1s. each. Out of this they had to pay for their railway tickets, the rest they could spend at the "Fair." When they reached the "Fair" they were charged 1d. admission to the "Fairground." Each game

cost another penny. Many of the children had been given sixpences by the booking-clerk as part of their change when they bought their railway tickets. When these children offered 6d. to a stall-keeper for a penny game they found that no change was given on the stalls, and were referred to a table in the corner on which was a large placard, "Change given here."

The children belonging to the class where the "Fair" was being held had asked if they might sell the return tickets. Near the door was a "Railway Booking Office," with the notice, "Please take your return tickets here." A poster on the door of the classroom advised the children to get their return tickets early before spending all their money.

Each stall had a stall-keeper and an assistant whose duty it was to see that the scores were added accurately.

When the children returned from the "Fair," they each made out an account showing how much they had spent. The accounts made out by Benjamin and Mary are given here.

Benjamin	1	d.	Mary		d.
Ticket to Fair		2	Ticket to Fair	•	2
Entrance .		1	Entrance .	•	I
Hoop-la .		I	Return ticket .		2
Skittles .	•	I	Hop/scotch .		I
Snap .		I	2 ball games .	•	2
Fishing game	•	I	Marble game .	•	1
Ticket back		2	Paper darts .	•	I
Hoop-la .		3			
_		*********			10
		12			

I had 12d. Spent 12d.	1s. to spend. = 12d. to spend. 10d. spent.
od.	2 <i>d.</i> left.

It was a sixpenny return fare to the room in which there was a cinema. Here the children had to refer to price lists when buying their tickets.

PRICE OF SEATS

2 front rows	•	•	. 2d.
4 middle rows	•	•	. 3 <i>d</i> .
2 back rows		•	. 4d.

The tickets and seats were numbered. Two ushers helped the patrons to find their seats.

A visit to the "Zoo" formed another trip. This time the train fare was $3\frac{1}{2}d$. The pets which happened to be in the different rooms at this time were all put into one room. Screens, or clothes-horses covered with material or paper, had been placed round the animals. A keeper was on duty by each cage. In order to see the animals, the visitors had to buy tickets. The prices of admission to see the different animals were shown on a price list.

TICKETS TO SEE THE ANIMALS

-	Rabbits	•	•	•		3 d.
	Lizards	•	•	•		$1\frac{1}{2}d$.
	Love birds	•	•	•	•	$1\frac{1}{2}d$.
	Doves		•	•		2d.

White mice	•			. $2\frac{1}{2}d$.
Goldfish .	•	•	•	. Id.
Newts .	•	•	•	. Id.
Tadpoles .				$\frac{1}{3}d$.

Sometimes the children make things for parties. One class made jellies. They discussed all the arrangements beforehand, and made notes in their books.

48 children arranged in 4 groups = 12 in each group. $48 \div 4 = 12$.

40.4	
Each group has:	Altogether there are:
2 shoppers	Shoppers $4 \times 2 = 8$
2 cooks	Cooks . $.4 \times 2 = 8$
2 furniture removers	Furniture removers $4 \times 2 = 8$
2 servers	Servers $4 \times 2 = 8$
2 waitresses	Waitresses . $4 \times 2 = 8$
2 dish washers	Dish washers $.4 \times 2 = 8$
-	
12	48
$-6\times 2=12.$	$6 \times 8 = 48.$ -

The children arranged to have one packet of jelly for each group. They found that a packet of jelly cost 4d. They worked out the cost of 4 packets:

```
I packet of jelly at 4d. = 4d. . I \times 4 = 4
2 packets of jelly at 4d. = 8d. . 2 \times 4 = 8
3 packets of jelly at 4d. = 12d. . 3 \times 4 = 12
4 packets of jelly at 4d. = 16d. . . 4 \times 4 = 16
12 pennies = 1s. 16 pennies = 1s. 16
```

Each pair of shoppers was given 4d. with which to buy a

jelly. The instructions on the packets were read, and each tablet was divided into quarters by the cooks.

1 jelly tablet =
$$\frac{1}{2} + \frac{1}{2}$$

= $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$

I tablet requires I pint of hot water.

 $\frac{1}{2}$ tablet requires $\frac{1}{2}$ pint of hot water.

‡ tablet requires ‡ pint of hot water.

I pint = 4 gills.

 $\frac{1}{2}$ pint = 2 gills.

 $\frac{1}{4}$ pint = 1 gill.

tablet of jelly requires 1 gill of hot water.

Each cook needs:

2 basıns.

I spoon.

2 quarters of a jelly tablet.

2 gills of hot water.

The children in each group watched their cooks make the jellies. They wrote in their books:

2 cooks made 2 jellies each = 4 jellies.

4 cooks made 2 jellies each = 8 jellies.

6 cooks made 2 jellies each = 12 jellies.

8 cooks made 2 jellies each = 16 jellies.

The cooks had made 4 jellies for each group. The children now worked out how many portions each jelly should be divided into by the servers.

4 jellies for each group of 12 children.

I jelly for each group of 3 children.

Each child will have ½ of a jelly.

The tables and chairs were arranged by the furniture removers. The children had decided that 4 children could sit at one table. They calculated that they would require 12 tables.

By participation in activities of this kind the child builds up a background of number experience. His first vague ideas are gradually transformed into clear concepts. He meets situations in which the need for number arises, and through these he develops greater skill in dealing with number relationships.

Chapter V

NATURE STUDY

MANY of the child's earliest activities are connected with nature and with natural materials. He plays with mud, sand, and water; he climbs trees, and chases butterflies and birds. He is interested in the movements and habits of living things. The question that occupies his mind is not so much "What does it look like?" as "What does it do?" He is interested to know how creatures will react to different treatment. He chases a kitten with a stick or pulls the legs off flies, not because he is being intentionally cruel, but because he is curious to know what will happen.

We do not wish to curb the child's desire to experiment. Neither do we wish him to be cruel to living creatures. He should be given suitable opportunities which will provide an outlet for his desire to experiment, and which will foster in him a love for living creatures.

The child should be trained to observe accurately. The young child's attention is quickly distracted from one thing to another. He does not examine things in detail, but receives impressions of things as a whole. He asks innumerable questions, "Who lights the stars at night?"; "What holds the rain up?"; "Why is my doggie's nose always cold?"

He tries to explain newly discovered facts in the light of his previous experiences. As these experiences have centred chiefly around human beings, he endows animals and plants with human habits and characteristics. After watching a young owl for some time, one little boy said, "He's blinking his eyes because he went to bed late last night." While feeding a rabbit with fresh green leaves, a child remarked, "I don't think he really likes these leaves, because he wrinkles his nose at them."

The child looks upon the forces of nature as separate beings having life. He asks, "What does the wind do when it doesn't blow?"; "Where does the day go when night comes?" He attempts to explain these forces in terms of human life. Thunder was explained by one child as being "the angels playing cowboys and Indians."

Nature study should be simple and direct. The child's observations of nature should begin with things in his immediate environment. The teacher should be ready to give simple, clear, and accurate answers to any questions that are asked, without attempting to give information the children are not ready for.

The study of plants, animals, and natural forces should be closely related to each other. In the following pages the work is dealt with under the three headings of plant life, animal life, and natural forces, but the children who did this work were led to realise the close relationship of all these aspects of nature.

This is not intended to be a nature-study scheme, but an indication of the contacts the children had with nature during their life in the school.

It is difficult in the city to give the children as rich and varied contacts with nature as can be given in the country. Even in the city, however, there are the sky, the sun, the wind,

rain, thunderstorms, and other natural phenomena. Trees, grass, and flowers are found somewhere near. Sparrows, robins, pigeons, and animals such as horses, donkeys, cats, dogs, rabbits, mice, are familiar to practically every town child.

In order to give the children more contacts with nature the teachers brought to the school flowers, plants, seaweeds, shells, pond creatures. The children were encouraged to go into the parks, squares, and public gardens, as frequently as possible. Those who went into the country or to the sea for a day brought back things for the classrooms. Many visitors from the country, who were interested in the work of the school, frequently sent boxes of twigs, wild flowers, seeds, bulbs, heather, moss, fungus, evergreens, wild fruits.

Through his contacts with nature the child should feel the rhythm which flows through all life, and should gain an impression of the cycle of life within the plant and animal world. He begins to realise the rhythm of the seasons: spring is the time of awakening life, summer the time of full blossoming, autumn the time of plenty, and winter the time of rest.

SPRING

Plant Life

During the early spring days the children noticed many changes in the parks, gardens, and window-boxes. First, snowdrops were discovered in the parks. Crocuses, daffordils, hyacinths were soon seen peeping above the ground.

The winter buds, which had been kept in the classrooms throughout the winter, began to throw off their outer protective covering and to put forth green leaves.

The growth of new life in the plant world gave rise to many activities on the part of the children. The flower show, planned the previous autumn, formed an intensely interesting activity in one class. The children watched every stage of the growth of their bulbs, and incidentally learned a great deal about the formation of the buds and flowers of different bulbs. They decided the day for the show and then made notices advertising it. Invitations were sent to the other classes.

Gardening is an activity which makes a great appeal in the spring. It was not possible for the children to have gardens to tend, but they had many of the pleasures of gardening after they made window boxes. Strong wooden boxes were obtained and holes bored in the bottom of these before the mould was put in. Excess water trickled away from these holes, and thus the earth was kept sweet. The boxes were raised slightly on pieces of wood in order that air might get under the box and so prevent the wood from rotting. In rooms where there was insufficient space for window boxes seeds were planted in pots. Window boxes and pots were filled with a good fibrous loam.

The children planted the seeds they had preserved from the previous autumn. They were shown how to water the seeds gently so that the supply of water resembled the natural supply as nearly as possible. The water used for the indoor plants was drawn off from the tap and kept in the room for a while so that its temperature became more like that of the room. When the seedlings began to grow, the children thinned them out in order to get stronger plants.

The children were not able to visit an orchard to enjoy the beauty of fruit trees in bloom, so sprays of blossom from different fruit trees were obtained for the classrooms. The teachers told the children where the fruit trees were in bloom in the parks, and some of the children went to see them. Pictures of fruit trees were collected and mounted. The children noticed the difference in the growth of the flowers. One child expressed the difference in the growth of cherry and apple blossom in this way, "The cherry blossom hangs in bunches. The apple blossom holds close to the branch. Perhaps it wants to feel the mother tree near it."

Most common plants need a certain amount of water in order to grow. The children proved this in a simple way by keeping two sets of seedlings in similar conditions, except that one set was given water, and the other set kept dry. The children saw that the seedlings which had no water soon began to wilt, while the others continued to thrive.

One little girl found a potato that was beginning to give off shoots. She brought it to school, where it was placed in a shallow bowl on the window-sill. After a day or two the children discovered that all the shoots were turning towards the window. The pot was turned round so that the shoots were turning away from the window. The shoots again changed their direction of growth, and turned towards the light. One child gave this explanation: "Of course! That's what it is. The poor little potato wants to look out

of the window." The children discussed this explanation, and, at the suggestion of the teacher, placed the potato near a window that did not admit a strong light. It was found that the shoots still turned towards the window which admitted the strong light.

"I know what it is," said one child; "the potato doesn't want to look out of that window. He wants to look out of the window where the sun comes in. It's the nice, bright sun he likes."

The older children conducted simple experiments to prove that warmth stimulates growth. Four sets of bulbs and four sets of seeds were planted in pots. Four fresh twigs of lilac were placed in water in different jars. One pot of bulbs, one of seeds, and one twig were placed in a warm, daik place. Other sets were placed in a warm, light place, a cold, dark place, and a cold, light place. They saw, after a while, that the bulbs, seeds, and twigs which had both warmth and light were the strongest. Those planted in a warm, dark place grew quickly, but the shoots were white instead of green. Those in the cold, light place were a healthy colour, but they grew very slowly: Those in the cold and dark made hardly any progress.

Animal Life

Throughout the winter the children had watched the robins and sparrows trying to find food, and sometimes huddling against the chimney-pots for warmth. During the spring they tried to find where these birds had built their nests. One spring two sparrows had built a nest between a

drain-pipe and the school wall. Although the nest was too high up for the children to see it well, they were able to watch the birds carrying pieces of straw to it when they were building. When the young birds began to fly, the children were intensely interested. One group of children set out shallow basins for bird baths, and saw the parent birds bring their young to bathe in them. Some of the children kept records, writing the date down in a book each time they saw the birds, and saying what they had observed.

New life is seen in the ponds and streams in the spring. The spawn of frogs and toads was brought to school by the teachers and put into the aquariums. The children's attention was drawn to the fact that the spawn of the frog is in dense, irregular masses, while that of the toad is in long strings.

One child brought the chrysalis of a butterfly, and the children had the joy of watching the emergence of the butterfly. They made butterfly books to record their observations.

Eggs of the silkworm were secured and kept for the children to observe. The larvæ were kept through the spinning stage.

Some of the children who had small gardens found worms, and brought them to school. A small glass tank was filled with alternate layers of moist earth and sand. The worms were placed on the top of the earth and the children watched what they did. Once the worms had burrowed into the earth they were seldom visible on the surface, but the children discovered the castings made by them at night. In order to get the worms to burrow close to the sides of the tank, black

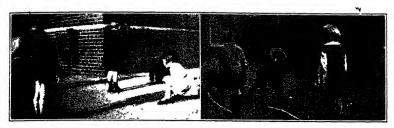
paper was put round the outside. This paper was removed when the children wanted to look at the burrows. They soon discovered that the worms were mixing the sand and earth.

Water snails were put into the aquariums. Land snails were kept in a vivarium, the bottom of which was covered with moist turf. The children brought lettuce leaves, cabbage leaves, or other green vegetable matter, for the snails to eat. They wanted to know many things about these snails; whether they find their shells, or grow them; and how they eat, walk, see, and breathe. The teacher directed the children's attention so that they were able to find the answer to many of these questions for themselves. They noticed the two pairs of horns or tentacles, and the eyes on the upper and longer pair. They noticed that these horns are extremely sensitive, and are quickly withdrawn when they come into contact with anything. The children noticed that the shape, size, and markings of both land and water snails varied considerably.

One boy came to school with the news that his cat's fur was coming out. Some of the other children said that their cats, dogs, rabbits, were also losing some of their fur, and that the canaries and parrots were losing feathers. The children asked why this should be so, and the teacher gave them the explanation.

Natural Forces

The children noticed that the days were longer and warmer, and that showers of rain were frequent. When the winds



OUR SHADOWS ARE LONGER IN THE AFTERNOON

MEASURING SHADOWS



MANY OF THE CHILD'S EARLIEST ACTIVITIES ARE CONNECTED WITH NATURAL MATERIALS



ALAN BROUGHT HIS LOVE BIRDS TO SCHOOL

ALAN'S FATHER CAME AND SHOWED US HOW TO MAKE BREAD

were high in March the children made kites, windmills, darts, weather vanes. The older children learned the directions and names of the winds. They watched the direction of the smoke from the chimneys, the position of the weathercock, and the way the flag was blowing. Daily records of the direction of the wind were made. These were compared with the other weather charts. The children gradually became aware of a connection between the wind and the weather; they found that the north wind is accompanied by cold weather, the east wind is biting, the west wind generally brings rain, the south wind is warm.

One girl made a book which she called, "Things the wind does." She painted pictures of children being blown by the wind as they came to school, leaves blowing off the trees, clothes blowing on the line, fishing-boats sailing on the sea. To these she added pictures and cuttings from magazines.

When the children had a washing day, and the weather was fine, they hung the washing on a line in the playground. They learned that the wind dries clothes quickly.

After a heavy shower of rain, when the sun came out again, the children were in the playground. They noticed the steam rising from the ground. One child cried, "Look, look! The playground's smoking." The teacher explained that it was not smoke but steam, and this gave rise to many questions. Where does the steam go? Does the sun dry it all up, or does it blow about the sky? Does it ever come down again? Why does the sun not dry up the sea and all the rivers? The children were taught something about

clouds and cloud formation, and soon became familiar with the characteristic shapes of clouds.

The frequent appearance of rainbows in the spring delighted the children. As soon as they saw the sun shining during a shower of rain they wanted to look for the rainbow. They learned the position of the rainbow in relation to the sun.

SUMMER

Plant Life

The summer-time brings a profusion of wild and cultivated flowers. The children saw as many different kinds of flowers as it was possible to procure. Many people sent boxes from the country. The children were encouraged to look for as many different kinds of flowers as they could when they went to the country. Some children kept pictorial or written records of all the wild flowers they saw during the summer. The older children made a simple classification of the flowers they saw.

Some tree books, in which they recorded the difference in the appearance of the trees now that they were covered with leaves were made by the children. They learned to recognise some of the more common trees, and to associate leaves with the parent tree. They watched for the flowers and the fruit of these trees.

Sweet peas and scarlet runners had been planted earlier in the year, and the children were very much interested in watching the way these plants supported themselves on twigs. Long sprays of bryony, wild clematis, convolvulus, ivy, creeper, were brought so that the children might see other climbing plants.

Pond and stream vegetation flourishes during the summer months. Some of the pretty water crowfoot, which may be seen covering the entire surface of many ponds, was brought for the large aquarium. It was pointed out to the children that this plant has two kinds of leaves, one kind floating on the surface of the water, and the other kind submerged, the latter being in the form of long, narrow tubes, while the former are broad and flat. The white flowers stand above the surface of the water on long stalks. The pondweeds in the aquariums increased rapidly during the summer, and had to be thinned out.

Many of the older children, who were keenly interested in making collections of various kinds, added to their collections in the holidays. When children first begin to collect, they are actuated by motives of curiosity or imitation or a natural love of collecting: They collect at random, their aim being to have "a big collection." Later they realise that a good collection consists of a wide variety of specimens rather than quantities of similar ones. One class decided to make collections during their summer holidays and to hold an exhibition on their return to school. Some children collected wild flowers, and pressed them, others collected seaweeds, shells, leaves. The children were very much interested to hear, on their return to school, the accounts given by the various members of the class of how and where they found their specimens. They formed groups, and each group

made a book for the class library. These books contained drawings of the specimens, pressed wild flowers, pictures cut from papers, notes, and articles. The teacher added a few simple nature readers to the class library, and these were appreciated all the more because the children had realised some of the joys and difficulties of making a nature book themselves.

Animal Life

The spawn of frogs and toads in the aquarium excited a great deal of interest. The children watched all the stages of metamorphosis. They saw the little, limbless creatures emerge from the jelly which surrounds the embryo, and cling to twigs or water weeds by means of sucking discs. In a few days they saw the tadpoles begin to eat some of the water weeds, and noticed that they soon became voracious eaters.

The "fringes" at each side of the tadpole's head attracted the children's attention. The teacher explained that these external gills enabled the tadpoles to breathe. As the tadpoles increased in size these gills gradually disappeared, and the children became concerned for the safety of the tadpoles. "How will they breathe if their gills get so small?" They were told that changes were taking place in the tadpole, and that they now breathed partly by means of their gills, and partly by means of newly developing lungs. The children noticed also the gradual appearance of the hind- and the forelegs and the disappearance of the tail. The tadpoles now began to eat shreds of raw meat, their digestive system having changed completely.

When the young frogs were ready to leave the water they were put in a large vivarium for a time, until they were returned to a natural habitat. In the vivarium was a small dish of water sunk into a piece of turf, and a few hiding-places made of stones. The frogs were well supplied with shreds of raw meat.

Toads resemble frogs in their metamorphoses, but they are easily distinguishable in the adult stage. The children had both frogs and toads, and were thus able to compare them. They noticed that the skin of toads is dry and dull, the bodies are broader, and the limbs shorter than those of the frog, and the hind-legs are not adapted for jumping.

The early development of the newt is very similar to that of the frog and toad, although the external gills are longer, the fore limbs develop first, and the tail is permanent. The young newts generally leave the water soon after they have reached the adult stage. As soon as the newts kept by the children made attempts to climb out of the water, they were removed from the aquarium into a vivarium. Here they were kept for a while, until the teacher took them to the park and placed them on a grassy bank near the pond.

Sometimes the children saw butterflies and bees while in the playground. They were told to watch the bees and butterflies in the parks, and to see how they went from flower to flower to get honey.

Ladybirds were sometimes found amongst the wild flowers sent to the school. The children kept them carefully for a day or two in a vivarium. They were afterwards taken into the playground and allowed to fly away.

Natural Forces

The children realised that in the summer the days are longer and the nights shorter. They discussed going to bed before the sun had completely set, and compared this with the winter, when they went to bed in the dark.

The children were very much interested in shadows. They learned that the position and length of the shadow varies with the time of the day. A class of children went into the playground during the early part of the morning and measured their shadows. When they went out again just before noon they found that their shadows were shorter. Next day they found that their shadows varied as before.

"Look!" said Tommy, "my shadow's grown longer again. I expect it will be a little dwarf at twelve o'clock."

Some of the children pointed out that, although they were standing in the same places, their shadows were not always in the same place. Joyce suggested that they should chalk lines for each other, showing the direction of the shadows. They found that these lines were washed out by a shower of rain, so the teacher said that she would paint one set of markings in order to preserve them. A line was painted, showing the direction of the shadow of one child at nine o'clock, twelve o'clock, and three o'clock. The teacher told the children that this was the way in which people used to tell the time. She showed them pictures of sundials, and suggested that they should go to the park, where they could see a real one. After this the children wanted to complete their own "sundial," so all the hours they were at school were marked in.

AUTUMN

Plant Life

The children joined in the general thanksgiving of harvest by having a harvest festival of their own at school. During "harvest week" the children brought fruit, vegetables, flowers. These were arranged in the rooms on a table. The children made harvest books, pictures, and posters. On the last day of the week the pictures, posters, and the harvest offerings were arranged in the hall, and the parents invited. The children gave harvest plays and sang harvest songs. The parents were provided with copies of the words of the hymns, so that they could join in the singing with the children. When the assembly was over, some of the older children helped to pack up the fruit, flowers, and vegetables for the hospital.

Twigs of beech, oak, hornbeam, spindle, rowan, long runners of bramble and creeper were brought to school. The children were thus able to enjoy the characteristic rich colouring of leaves in autumn.

Such flowers as the snapdragon, aster, marigold, golden rod, chrysanthemum, which are full of bright colour, were arranged in bowls, jugs, and vases by the children. Some of them noticed the outstanding differences in the form of these flowers, the two closed lips of the snapdragon, the many tiny flowers of the sunflower head, the long tube of the nasturtium.

Many flower and vegetable seeds were collected by the children during September and October. These were

sorted into labelled boxes, and kept for planting in the spring. The children noticed that some seeds have tufts of hair, others have wings, hooks, or prickly burrs. They asked many questions as to the reasons for these differences. Some had seen burrs clinging to the wool of sheep, the winged seeds blown down by the wind, and practically all of them knew the seeds of thistle and dandelion.

The children were familiar with the differences in the shape, size, and colour of cultivated fruits. Their attention was drawn to the fact that there are differences in the seed formation of these fruits. They knew that some fruits, such as plums, peaches, damsons, have stones inside them, but many were surprised to find that inside these stones were seeds. Wild fruits, such as sloes, blackberries, haws, rose-hips, were examined by the children, in order to discover the seeds. The older children discussed the different methods adopted by plants for seed-protection.

Horse-chestnuts and acorns were collected, and kept for spring planting. A few chestnut burrs were kept in the classroom, so that the children could watch their opening more closely. One little boy, who discovered the first split in the chestnut burr, said, "Look! He's growing too big for his coat." When the burr was finally open, he said, "Why, he's split all the sides of his coat." Looking more closely at the burr, he remarked, with great excitement, "Look! look! There's more than one chestnut in the same coat. That's why they've split the sides of it, of course it is."

During the autumn, bulbs were planted ready for the

following spring. Garden mould was used in the ordinary earthenware pots, and leaf mould, or specially prepared fibre, in glazed pots. The children were generally so eager to know how their bulbs were progressing that they could not bear to keep them in the dark for any length of time. In order to retard the growth of the shoots until the roots had developed strongly, the children made little "caps" of paper, and kept these over the shoots. These little "caps" were lifted off when the children wanted to peep at the bulbs.

One class of children decided to plant bulbs at home, and to have a bulb show in the spring. They were each given a few bulbs. After many discussions as to the best way of growing these, the children drew up the following list of "hints":

How to look after your Bulbs

Keep your bulbs in the dark for a few weeks after you have planted them.

Keep the soil moist.

When the shoots begin to grow, put the bulbs in a warm, sunny place.

Animal Life

During the autumn the children heard from the country children, with whom they corresponded, that large numbers of birds were preparing for their autumn flight. One child sent an interesting account of the flocking of the starlings:

"In the evening we see hundreds of starlings fly up into the air together. It looks as though they are doing

drill in the air, because they all do the same thing together. When it is dusk all the birds come down on the trees and make a great deal of noise. Some of them whistle, some of them sound as though they are bubbling water in their throats."

The children were told to watch for the squirrels in the park, and to notice how they were scarching for food to store for the winter. They were told about other animals, such as the mole, the beaver, the dormouse, the hedgehog, who also prepare for winter in the autumn.

Some spiders were kept in a vivarium. Cocoons, received from the country, were kept in a wire cage on a convenient outside window/sill, as the atmosphere of the room was too dry for them.

Natural Forces

The children noticed, as the autumn advanced, that the days became shorter, the hours of sunshine fewer, that the sunshine was less bright than during the summer months, and that their shadows were at no time as short as they were during the midday hours of the summer.

They noticed the frost on the roofs of houses in the morning, and were told to notice how bright the stars looked when the nights were frosty.

WINTER

Plant Life

Twigs, with winter buds, were kept in the classroom throughout the winter. The children tried to recognise the

trees in the parks and squares in their winter condition. They noticed how the fallen leaves made a covering on the earth, protecting the seeds and roots from the cold of winter. Some of the children collected leaves, and placed them on top of the bulbs they had planted in pots.

Such trees as spruce, yew, Scotch fir, cedar, interested the children considerably, because they did not shed all their leaves, as the other trees did. They noticed that the ivy on trees and walls of buildings also retained its leaves. Branches of evergreen trees and shrubs were brought into the classroom. The children noticed that some of the leaves resembled short needles, that other leaves were smooth and very tough, that some branches had cones on them.

Animal Life

During the winter the children saw such birds as the robin, the sparrow, the pigeon. Some of them were taken by their parents to the river, or to the lake in the park, to see the gulls.

The children were able to observe some birds more closely during the cold months of the year, because the birds were attracted by crumbs, pieces of suet, coco-nut, and fat placed on a window-sill, or hung just outside the window. A robin grew so tame that he used to come to the window-sill and wait for crumbs to be put out.

The country children wrote to say that a blackbird came to their garden every day for crumbs and pieces of fat, and that some bluetits were attracted by a piece of coconut. They sent photographs of the blackbird, but said it was

difficult to photograph the bluetits, as they were so "fidgety" and never seemed to be still for a moment.

The children lived near a large station, the fathers of many of them were carters for the railway company. Most of the horses were stabled near the school. The children saw them being led out and harnessed into the vans. The children frequently discussed the horses, supplying detailed information about the different kinds of fodder used.

They discussed the use of heavy cart horses, ponies, and donkeys. Their interest extended to other animals they had seen at the Zoo or on the farm. Pictures of cows, pigs, horses, oxen, reindeer, camels, dogs, were collected and put into a book which they called "Man's Helpers."

The children's pet cats, dogs, birds, were always a source of interest and discussion. Alan brought his love-birds to school on many occasions. One child borrowed his auntie's guinea-pig and brought it to school for the day. The boys in the Junior School kept rabbits, so these were frequent visitors to the Infant School.

Natural Forces

One winter, when hard frosts were experienced, some of the children saw the ponds in the parks frozen over. The water in the horse troughs was frozen, and the children came to school with the news that they had seen the carters breaking the ice so that their horses might drink.

A bowl of water was placed on an outside window-sill at the end of the afternoon session, and the children found, on coming to school in the morning, that the water had been



WASHING DAY



AN OPEN AIR CLASS

frozen. When it was brought in to the warm classroom they saw the ice melt.

When snow fell there was great delight. The children played with it in the parks and squares. They brought cuttings from papers and magazines showing snow-scenes in other parts of the country. They noticed how the snow rests on the branches of trees, and clings to the side of the trunk when a wind has accompanied the fall. They were told stories of the St. Bernard dogs and their work in rescuing people lost in the snow on the mountains. They were also told how the snow acts as a warm covering for all the seeds, plants, and roots of trees.

The country children sent photographs of snowmen they had made in the school garden, and photographs of groups of them having snowball fights.

Some of the fogs were very thick during the winter, and the mornings were quite dark. The children saw the traffic delayed, and learned how ships on the rivers and sea have to take precautions against fog. They were interested in the peculiar appearance of the sun when it began to shine through the fog. The teachers had to answer many questions as to the cause of fogs: why fogs at sea and in the country were white instead of yellow or brown, why fogs made the eyes smart and the throat feel sore.

KEEPING PETS

The question of keeping pets in school is subject to much controversy. Some people object to pets on hygienic grounds. Others consider it cruel to keep animals in cap-

tivity, and argue that, in keeping pets, the children are receiving bad moral training.

The question of hygiene has to be given serious consideration. Many classrooms are small and poorly ventilated and are therefore unsuitable for the housing of pets. If the room is very large and arry, then it is possible to keep pets in it for a time. Otherwise the animals should be kept in a garden or yard.

The cages of birds and animals should be cleaned out every day. If sawdust is sprinkled over the floor of the cages of the smaller animals, cleaning is made more easy. The cages most easily cleaned are those constructed with a shallow tin tray covering the base. This is pulled out like a drawer for cleaning.

Rabbits, white mice, guinea-pigs, hens and chickens, doves, make suitable pets. Such creatures are born and reared in captivity, and therefore the question of the cruelty of imprisonment does not arise.

Provided the conditions are hygienic, and no cruelty is involved, there can be little doubt as to the educational value of keeping pets in school.

Generally, the animals should be temporary visitors only, so that the children become acquainted with as many different animals as possible. The children should be trained to assume responsibility for their pets, and to feel that the animals are dependent on them for food and comfort. Their natural curiosity finds satisfaction in observing and caring for their pets, and, incidentally, they learn a great deal about the habits and needs of the creatures in their charge.

Sometimes the children are able to help in preparing the homes for their pets. All the rodents should be provided with strong wooden cages. It is sometimes necessary to fix pieces of zinc along the edges of the cage where the animals gnaw. One side of the cage should be fitted with wire netting, in order to allow plenty of light and air to enter the cage.

The cages should be divided into two by means of a partition, one part being more secluded. There should be easy access between the two parts, so that the animals may easily get to the secluded part if they wish to escape observation. Materials for nesting should be provided.

The children should be taught that the animals need feeding wisely if they are to continue healthy. Rabbits and guinea-pigs cat green-stuff. They like lettuce, dandelion leaves, carrots, and a little bran or oats. Mice like biscuit, bread and milk, cheese, apple, and shelled nuts. Dormice eat apple, nuts, and an occasional biscuit. All the pets should be given fresh water daily. The children may have a fund for the provision of food for their pets. Sometimes the children elect a committee to look after the provision of food, and this committee issues notices and bulletins regarding the diet of the pets, and specifies which children are to be responsible for the care of the pets during the week.

KEEPING AN AQUARIUM

Pond animals are intensely interesting to children. Unlike many other animals, they require little attention, provided they are placed in an aquarium which resembles their natural habitat.

Since young children need to observe many forms of life, rather than to study any one in close detail, it is better to change the creatures in the aquarium from time to time.

The aquarium should always be made ready before the creatures are removed from their native pond or stream. No hard and fast rules for making and stocking an aquarium can be given. It will be necessary to experiment, and to make adaptations as need arises. The successful aquarium is always one that most nearly represents nature.

Three things should be considered when making an aquarium. In the first place, there should be a balance between the animal and plant life in the aquarium. The well-being of the animals depends on a healthy growth of plants, because the plants give off oxygen which is needed by the animals to maintain life; they absorb the poisonous carbon dioxide given off by the animals; they provide food for those animals that live on a vegetable diet. When balancing plant and animal life in an aquarium it is not necessary to consider such creatures as water spiders, water bugs, and water beetles, because these breathe at the surface of the water.

The second thing to be considered is the ventilation and the temperature of the water. The ventilation is largely effected by the plants, but water is able to absorb some oxygen from the atmosphere. It is therefore advisable to choose a broad vessel for the aquarium rather than a narrow one, because a larger surface of the water is thus exposed to the air. The aquarium should be protected from bright sunlight, and the temperature should be between 40° and 50° Fahrenheit.

The third thing to be considered is the choice of the plants and creatures for the aquarium. There are many water plants which are suitable for growing in either large or small aquariums. The duckweeds, found on most ponds, float about on the surface of the water. They spread very rapidly, darkening the water and keeping it cool, and are therefore very suitable for the aquarium. The American pondweed is also a useful plant, as it gives off a great deal of oxygen, and thus helps to keep the water pure. It is liked particularly by those animals which eat only vegetable food. The hornwort, a hardy floating weed, generates a large amount of oxygen.

The pondweeds are pretty plants, and add greatly to the beauty of the aquarium. Their flowers are insignificant, but the leaves are brightly coloured, and are useful oxygen producers. One of the prettiest of these plants is the starwort, which has leaves arranged in star-like clusters at the top of the stems.

It is not possible to keep all pond animals together, because many of these creatures prey on one another. It is necessary to select the animals which are to be placed together. A few suggestions for combinations of animal life are given below:

- 1. Tadpoles, caddises, snails.
- 2. Small fish, snails, newts.
- 3. Dragon-fly, larvæ, snails, minnows.
- 4. Carnivorous water-beetles, snails.
- 5. Insects, such as water boatmen, water scavenger beetle, water scorpion, diving beetle.

The question of feeding is important. The carnivorous insects need animal matter and eat worms readily. Newts also eat small worms and occasional shreds of raw meat. Fish eat some pondweeds, and should also be given tiny earthworms, "gentles," fish food, "ants' eggs." All these things can be obtained from any live-stock dealer. Tadpoles and water snails are natural scavengers, and help to keep the sides of the tank free from green slime and scum.

It is essential that no dead plants or animals are left to decay in the aquarium.

The bottom of the aquarium should be covered with two or three inches of clean sand. The roots of the water plants are fixed firmly in the sand, and, if necessary, anchored with stones. Little rockeries and hiding-places can be built up with clean, irregular stones.

Rain or pond water is better than tap water for the aquarium. The water should be poured in very gently, and care taken to avoid dislodging the plants.

When the plants are flourishing, the aquarium is ready to receive the living creatures.

Chapter VI

MUSIC

Music appeals to most children. They gather round the hurdy-guidy in the street, they dance when they hear the piano or gramophone, they sing to themselves as they play.

This love of music is stimulated by the experiences the children have in school. They hear people singing and playing the violin and piano, they listen to gramophone records, they sing together, they interpret music through rhythmic movement, they take part in the percussion band. Together with such stimulation, they receive training which helps them to understand and appreciate music.

SINGING

CHOICE OF SONGS

The songs chosen tor young children should not be too difficult. The music should have a strong rhythmic appeal, and the words should be interesting to the children. Generally, songs with few verses should be chosen, so that the children are able to learn a greater number of songs. Beautiful melodies having words unsuitable for young children may be learned as "songs without words."

Little children's voices are naturally high, therefore the songs chosen should not be pitched too low. A good compass is Db to Eb. If songs are pitched too low, the children tend to "speak" the music rather than to sing it.

TEACHING SONGS

New songs are always sung to the children. Sometimes the teacher sings two or three during a lesson and asks the children which one they would like to learn. The younger children sometimes learn the tune by pretending to play the violin while they hum softly, to play a trumpet while they sing the tune to "too," to beat with drum-sticks and sing the tune to "pom," or to shake the bells while singing "ting-ting."

Generally the children learn the song as a whole, and not phrase by phrase, but occasionally it is necessary to practise certain phrases separately.

The children enjoy singing antiphonally. This helps them to appreciate the phrasing of the music. The children are divided into two or more groups, each of which sings a different phrase or passage of the song. For example, the children may be divided into three groups to sing "If all the world were paper":

GROUP A: If all the world were paper,

GROUP B: If all the sea were ink,

GROUP C: If all the trees were bread and cheese, ALL: What should we have for drink?

For singing "Where are you going to, my pretty maid?", the boys and girls may face each other and sing the appropriate parts. For such songs as "Billy Boy" one child may sing the solo.

BREATHING EXERCISES

"Handkerchief drill" and breathing exercises are the preliminary to every singing lesson. Various breathing exercises are described in the chapter on Language.

An exercise which has been found particularly useful in helping the children to control the breath while singing is that of breathing out while singing 1, 2, 3, 4, 5, on the same note. Some of the older children are able to sing from 1 to 10 in one breath. They are told to stop singing immediately they feel short of breath. There should never be any suggestion of strain.

SINGING EXERCISES

Quality of tone is far more important than quantity; therefore all the exercises given in the singing lesson are designed to help the children to produce a good, clear tone. Most of the exercises are begun on a high note and sung in descending order, because this helps to preserve the quality of tone on the lower notes.

The vowel sound "oo" is often used for the first exercises, as it is an easy sound on which to produce a good quality of tone. A useful exercise is the singing of the vowel sounds



"oo," "oh," "aw," "ah," "ay," "ee," straight after one another, either on the same note, or down the scale. These sounds are sometimes pieceded or followed by a consonant.

The development of a resonant tone is most important. The children are helped to produce a resonant tone by making "trumpets" with their hands. The hands are placed on either side of the mouth and nose, the tips of the fingers being joined above the bridge of the nose, and the fingers curved so that there is a slight gap before the mouth. The sounds "oo," "oh," "aw," "ah," "a," "e," "ee," "u" (as in lune, French) are sung through this "trumpet."

Humming tunes and scales to "m," "n," ng," helps to develop resonance of tone. The lips are lightly closed when humming "m," and the vibration is felt behind the lips. There should be a vibration in the nose when singing such sounds as "n," "ng," "ting," "ning." The children may feel the vibration in the nose by placing the first two fingers of one hand down the side of the nose.

Not more than three or four-minutes at the beginning of each lesson should be spent on voice exercises.

LOUD SINGING

Some children are inclined at first to sing as loudly as they can in an effort to make their voices heard above the rest. Over-loud singing can usually be checked by asking such children to sing more softly. As the children become used to singing together, the tendency to shout seems to disappear quite naturally.

SINGING OUT OF TUNE

Singing out of tune is frequently found to be the result of lack of concentration. The children who sing out of tune are tested individually. If they are able to imitate a note correctly when concentrating, they are next given exercises in imitating two or three notes. Sometimes they imitate the notes after hearing them played, sometimes after hearing them sung. Gradually the number of notes is increased. A few children in a school may be quite incapable of imitating a note because of some defect in their powers of hearing or vocalisation, but most children who sing out of tune are considerably helped by individual training.

SINGING IN A MONOTONE

Children who sing in a monotone generally are not conscious of doing so. They need many exercises such as those given on pp. 163 and 164 which will make them conscious of differences in the pitch of sounds. Interesting little devices are adopted for helping such children to use the top register of the voice. They are given a high note to sing, and are told to put their hands on their heads in order to "feel" the voice. Sometimes they are told to stretch their arms up high as they sing a note, or to stand on a chair in order to get an even higher note. Such devices usually succeed. Once the children have been successful in singing a high note the difficulty is more than half overcome, but continual practice is necessary.

Another exercise helpful to such children is that of pretending to blow a horn or bugle. The children make a trumpet shape with their hands and sing, for example, "too-too." They may be the huntsmen blowing a horn. At first the exercise should be very simple, the children singing only from soh to doh. Later, when they are able to do this, the exercise may be made more difficult.



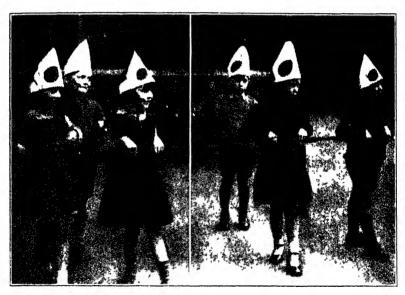
Singing street/calls is another interesting exercise; milk/o—me/doh; Hot Cross buns—soh/soh/doh; chairs to mend, old chairs to mend—soh/fah/me/lah/soh/fah/me.



Songs in which the high notes are associated with a high object are useful. For instance, in "Humpty Dumpty" the word "wall" is sung on a high note, and in "Wee Willy Winkie" the call through the keyhole is also sung on a high note. In the former song the children may be helped to get the high note by trying to "get their voices on top of the wall." In the latter, they may be told to stand on tiptoe in order to pretend to reach the keyhole.



A RED INDIAN DANCE



"HORSES AND DRIVERS"

RHYTHMIC MOVEMENT

COMPARING INTENSITY OF SOUND

The children are conscious that there are loud sounds and soft sounds. They make a loud noise as they vigorously hammer nails into wood, or knock down the large block tower they have built. They hear voices shouting in the street, and the heavy rumble of carts, motors, and trains. They hear the soft sound their balls make as they bounce them, and the soft whisper of voices in the "silence" game.

When definite training in comparing the intensity of sounds in music is begun, the contrast is made as great as possible. A number of chords may be played loudly and then softly. When the loud chords are played, the children stand on their toes, with their arms stretched above their heads; when the chords are played softly they kneel on one knee, with their heads down and their arms to their sides. To a loud marching tune the children walk with firm steps, holding the head high; to-a march played softly they take small, quiet steps. When a loud skipping tune is played, the children skip round, springing as high as they can, and stretching the whole of their bodies. A skipping tune is played softly, and the children try to make themselves as light as possible.

After some experience of comparing loud music with soft music the children listen to music which has crescendo and diminuendo passages, and express the increase and decrease in sound in a variety of ways. A piece of music is played very softly to begin with, gradually increasing in sound and then dying away again. The children may stand with one foot forward and the arms stretched in front of them. As the music grows louder they move their arms out sideways, bringing the arms together again as the music grows softer.

The children kneel on one knee, with their heads down and their arms in positions of repose. As the sound grows more intense they slowly raise their arms, heads, and bodies, until they are in an upright position, with their heads thrown back and their arms stretched high above them.

Sometimes they move away from the piano as the music grows louder, and towards it again as the music grows softer. As they move they make any gesture in the direction of the piano which seems to them to indicate the feeling of the music.

The children pretended to be bulbs by curling themselves up on the floor, by crouching, or by sitting cross-legged with their heads drooping. At the first soft note of the music some of the children started "growing." Others took longer to begin. As the music grew louder the children expressed the feeling of growth in different ways. At the end of the music all the children were representing fully grown flowers, except one little girl, who was still curled up on the floor. When asked why she had not grown, she said, "I'm the daffodil bulb in our green bowl that hasn't come up yet."

One child was chosen to be a "magician." All the children knelt at one end of the hall. As the music grew louder the "magician" gradually stood up, at the same time moving her arms to suggest that she was changing the children in front of her from dwarfs into giants. The children gradually stretched themselves. When the diminu-

endo came, the "magician" transformed the giants into dwarfs again.

PITCH

The children begin to notice that there are high and low sounds. When notes are played in the treble clef the children stretch up, when they are played in the bass they kneel; when a tune is played in the treble clef they pretend to be fairies, when a tune is played in the bass they are elves. The boys may step a rhythm played in the bass, the girls step it when played in the treble. When another tune is played they change over, the girls stepping when it is in the bass, and the boys when it is in the treble.

Sometimes the class is divided into two groups which form circles one within the other. Minims, crotchets, or quavers are played either in the treble or bass. One circle moves for the treble, the other for the bass. If the notes are played in the treble and bass together, both circles move. As soon as the music stops in either one of the clefs, the appropriate circle stands still. The exercise becomes more difficult when, for instance, quavers are played in the treble at the same time as crotchets are played in the bass.

A difficult exercise which may be given to the older children is that of stepping a rhythm in canon. The rhythm may begin in the treble and after a few bars or a phrase begin in the bass, while still continuing in the treble. Thus the two groups begin stepping at different times, and are, therefore, stepping different parts of the rhythm at the same time.

Another interesting exercise is that of moving forwards

for sounds that ascend in pitch and backwards for sounds that descend in pitch. At first this exercise should be very simple, the teacher playing ascending and descending scales. Sometimes, instead of the whole scale, only a part of the scale is played.

PHRASING

The children are trained from the beginning to feel the phrase divisions in music. The teacher may play a simple eight-bar melody, such as "Jack and Jill," emphasising the pause at the end of the first phrase. Before she plays it again the children are told to listen for the "breathing space" in the tune, and to raise a hand when it comes. At first some children do not notice the "breathing space," but after a little practice they are able to do so.

The children are trained to listen for the approach of the end of a piece of music. The end is marked in various ways. Sometimes the music becomes slower and softer, gradually dying away; sometimes it becomes broader and more majestic in effect; sometimes it is played more quickly, gradually getting louder as it works up to a climax.

The children are given a good deal of practice is discovering the phrase units in different tunes. They mark the phrase divisions by walking forward for one phrase and backward for the next, or by one group moving forward for the first phrase and another group moving forward for the second. During the third phrase the first group may move backwards, and during the fourth the second group may move backwards.

The phrases in such a tune as "Polly, put the kettle on," may be marked in some such way as the following:

1st phrase . . . Group A claps.
2nd phrase . . . Group B claps.
3rd phrase . . . Group C claps.
4th phrase . . . All clap.

A child may be selected for Polly. The children stand in three informal groups:

1st phrase. Group A runs forward to Polly and sings, "Polly, put the kettle on."

· 2nd phrase. Group B runs forward to Polly and sings, "Polly, put the kettle on."

3rd phrase. Group C runs forward to Polly and sings, "Polly, put the kettle on."

4th phrase. All sing, "We'll all have tea."

The children arrange themselves in four groups. A "conductor" stands in the centre of the hall. She indicates which group shall come to the centre, conducting a new group each time a new phrase begins. When all the groups have come to the centre, she may conduct them back to their previous positions.

The children sometimes show the phrase-endings in the following way. For a two-phrase melody they group themselves in threes, two children kneeling to represent the phrase-endings, and the other child stepping the phrases. This child touches the hand of one of the kneeling children as each phrase comes to an end. At first some of them will

space their phrase-endings too close together, so that their movements are cramped when they step the phrases; others will space them so far apart that they will have difficulty in reaching the phrase-endings. With practice the children learn to space their phrase-endings according to the length of the phrases they have to step. The children form larger groups according to the number of phrases occurring in the melody. For a melody containing four phrases, the children group themselves in fives, four kneeling to represent the phrase-endings, the fifth stepping the rhythm.

Another way is for the children stepping the rhythm to stop before one of the children representing the phrase-endings and take up some position. This position is copied by the other child and held until the whole melody is completed, whereupon the children stepping the rhythm kneel with their heads drooping.

The children create simple dances. They listen to a melody, noticing the phrase divisions, and plan their own dance. The music is played again and each child gives his own dance. Sometimes a few children may be chosen to show their dances individually to the rest of the class. When they have had experience of planning individual dances, the children may plan group dances. A child may be chosen to select a group and show her dance. The melody is played through again, and the leader tells her group the movements she wants made to each phrase. Two dances worked out in this way by children are given below.

Eight children were selected by the leader. These children formed a ring and the leader stood in the centre.

Phrase 1

The children in the ring held hands and ran round the leader. The leader conducted them round.

Phrase 2:

The leader conducted the children to the centre. The children knelt as the phrase ended, the leader standing with her arms stretched above her head.

Phrase 3:

The children were conducted out from the centre to form a ring again, joining hands as the phrase ended.

Phrase 4:

The children ran round in a ring, holding hands. As the phrase ended, they knelt on one knee, facing the centre. The leader stood on tiptoe with her arms stretched above her head.

Twelve children were chosen by the leader. The children took partners and stood facing them, forming two rings.

Phrase 1:

The partners changed places and came back to their original positions.

Phrase 2:

The partners on the outside ran round in a circle and came back to their original positions. The partners on the inside conducted them round.

Phrase 3:

Partners changed places and came back again.

Phrase 4:

The child on the outside took her partner's hand, leading her as the group ran round in a circle.

A tune was played, and the children were asked to suggest ways in which they could mark the phrases. One suggestion was that they should pretend to be a flower.

"No, we've been flowers before. Let's do something else!"

"I don't mean all be flowers," said the child who had made the original suggestion; "couldn't we all pretend to be one big flower opening its petals to the sun?"

"Yes, yes! We can all be the petals."

The children decided that, as they were all going to be the petals of one flower, they should all move together and do the same thing. They based their movements on the phrases. They tried several different arrangements before deciding that they liked the following one the best:

Three concentric circles were formed. All the children knelt on one knee with their hands joined and their heads down.

Phrase 1:

The children stood up slowly, keeping their hands joined, gradually stretching these towards the centre.

Phrase 2:

The children slowly leaned backwards, raising their arms above their heads.

Phrase 3:

The children brought their bodies forward again and lowered their arms towards the centre.

Phrase 4:

All knelt slowly.

NOTE VALUES

The children learn that notes are of different lengths. The teacher may play some chords giving each the value of a crotchet. The chords may be played again. This time they are given the value of quavers. The children may be asked what these notes seem to be doing. Are they walking or running? The children run when the teacher plays quavers and walk when she plays crotchets. They walk slowly when she plays minims, and skip when she plays dotted quavers and semiquavers. At first she makes a break between playing different groups of notes, and the children stand still, but after some practice she changes from crotchets to quavers, or from minims to crotchets without a break, and the children have to change their steps as soon as the music changes.

The children may be divided into four groups to step minims, crotchets, quavers, dotted quavers, and semiquavers. As the children hear the notes they are representing being played, they move round in a circle, or stand still and clap the notes, or follow in a file behind their leader, or do anything else that has previously been decided upon.

The children learn the correct name and the written form of the different notes. The leader of the group may wear a paper hat, on the front of which is painted the note the group is representing, or the group may move in a circle round a note cut out from paper and placed on the floor, or each group may move towards a placard, bearing its own note, placed in some position in the hall.

The children also learn the relationship of the notes to the

semibreve. While one circle is stepping semibreves another may step minims or crotchets. While one steps crotchets another steps quavers, and so on. The children may form groups of three, one child being a horseman and the other two being horses. Quavers are played in the treble clef and crotchets in the bass. The horse runs to the quavers, the horsemen walk to the crotchets. Sometimes crotchets are played for the horses and minims for the horsemen.

In such ways the children discover that there are two minims to a semibreve, two crotchets to a minim, and so on. Blackboard work, as suggested on pp. 179 and 180, is also taken in this connection.

Children respond quite naturally to rhythm. They should be thoroughly familiar with a rhythm before they try to step it. After listening to a rhythm they clap it with the piano, afterwards stepping it. They try to step many rhythms, because the more experience they have the better they are able to follow the rhythms, and to give each note its true value.

PULSE

When children are being trained to feel the accented beats in music and to discover the time in which it is written, it is necessary at first to exaggerate the accented beats.

A short rhythm or chant in 2-pulse time is played. The children are told that the strong beat is always "one," and that wherever this occurs it is called "one." They may say "one" on this beat, and then see how many they can count before this strong beat occurs again. It is helpful if they clap, accenting the strong beat. They quickly discover that

the tune "counts two." They may step the rhythm, accenting the strong beat with the foot.

In the same way the children are introduced to 4-pulse and 3-pulse time. They are shown how to beat time.

2-pulse: down, up; down, up.

3-pulse: down, out, up; down, out, up.

4-pulse: down, across, out, up; down, across, out, up.

A chord or note is played as a signal to get ready. The hands should be stretched up at this signal, because the first movement is a downward one.

The children hear tunes played at different tempo, so that they become accustomed to recognising the pulse whether the tune is played quickly or slowly. Music in which the time changes is played, and the children change their beating accordingly.

When the children have had some practice in beating time, they try to beat while stepping semibreves, minims, crotchets, quavers. This exercise is preparatory to the more difficult one of beating time while stepping a rhythm in which the notes are of different value.

HARMONY

The children are given simple exercises which begin to develop in them a feeling for harmony. They learn that certain notes "play happily together." The teacher plays one note on the piano, and asks the children how many notes she is playing. Next she plays two harmonious notes, the children again telling her how many she is playing. After

this she plays three notes and then a chord. The children kneel. When they hear one note they raise one arm in front of them, when they hear two notes they raise both arms, for three notes they put their arms above their heads, for four notes or a full chord they stand up with their arms stretched above their heads. This exercise may be varied by the teacher playing, for instance, one note first and then three notes, or two notes and a full chord.

The children learn that tunes have a "home," and that usually they return to their "home." A short tune is played to the children. Before repeating it the teacher plays doh a few times until the children are familiar with it. She tells them that this is the "home" of the tune she has just been playing, and that if they listen again they will hear the tune go out for a walk and return home.

The teacher plays a few more short tunes, each time playing the doh first. The children may raise a hand when they hear the tune return home. Another time she may play a tune which does not return to the doh. The children realise the tune has not returned to its home, and when asked to do so, will be eager to sing the note (doh) which will bring the tune home.

The children are told that the tune is going to ask a question, and that at the end of the question the tune will not be at "home." They are asked to try to make up another phrase which will answer the question and take the tune "home." A phrase is then played, ending on soh, and a child is chosen to give his answering phrase which will "sing the tune home." The first phrase may be played

through again, another child answering it this time. Later on, the children may compose both the questioning and the answering phrase, one child singing the questioning phrase and another child answering it.

RIIYTHMIC INTERPRETATION

A group of children were told that they were going to hear a piece of music called "Goblin up the Chimney" (Kullak). They had a chat about goblins before listening to the music. After hearing the piece a few times the children interpreted it in their own way. Their interpretations differed considerably. Some of the children took no notice of the changes in the music.

The teacher played the first runs again, and asked the children what they thought the goblin was doing. Various suggestions were given.

- "I think the goblin is running out from the chimney."
- "I think he's tumbling down and then falling into the hearth."
- "I think he is running up inside the chimney, because the little notes are running up."
- "I think the little notes go up just to show that the goblin is getting nearer. He's sliding down the chimney and landing with a bump. That's what I think."
- "I think there's more than one goblin, and they're having a game pushing one another down the chimney. They're making the soot fall down too."

The children noticed the pause in the music, and thought

that the goblin must have stood still then. They noticed also that the music was different after the pause. They suggested what the change in the music might mean.

- "He's dancing round, making funny faces."
- "I think he's found a hammer and is banging on the floor with it."
- "They're stamping their feet in the soot they've knocked down the chimney."
- "He's taken off his cap and he's throwing it up in the air."
 - "He's found a drum and he's beating it."
- "He's run up the chimney on to the roof, and now he is hopping round the chimney pot."

When the teacher played the next part the children thought that now the goblin was dancing. One child suggested that he had taken off his shoes so that he could dance more lightly. Others thought that the goblin had gone up the chimney and the fairies had come out to dance.

After discussing each part in this way, the children interpreted the whole piece of music again. The piece was studied in greater detail in subsequent lessons. For instance, the children counted the number of steps taken by the goblin each time he ran. They put more detail into their interpretations and followed the music more closely.

One class listened to a gramophone record of an orchestra playing "In the Hall of the Mountain King" (Peer Gynt Suite, Grieg). They were not told the name of the piece,

but were asked to listen carefully, and, when the music ended, to write down what they thought it was about.

The following are some of the children's descriptions:

"There's a storm rising. The wind gets very strong and blows the leaves into the air and breaks branches off the trees. There's thunder and lightning too."

"It sounded like heavy machinery starting in a factory. At first there was only one machine and it was going very slowly, but after a bit more and more machines started, until all the machinery in the factory was working. Lots of the machines wanted oiling."

"This is a piece about a runaway horse like I saw last week. The horse was trotting along and something frightened it, so it galloped away down the street. It galloped away down the street until some man managed to get hold of its reins and stop it."

"I think it was a house on fire."

"When I heard that music I thought about the fight between the pirates and Indians in the story of 'Peter Pan."

"It sounded like a heavy train going out of the station and working up steam."

"I think it's about a storm at sea. At first there are only little waves and the wind isn't much either. But then the waves get very big, and the wind blows like anything. Right at the end there's a shipwreck. You can hear the ship crash on the rocks."

The children enjoy expression work of this kind. They hear a great deal of music which lends itself to rhythmic

interpretation. Through their enjoyment of the music, their discussions about the ideas it suggests to them, and their spontaneous interpretation of it, the children are helped to a greater appreciation of music.

PERCUSSION BAND

Anyone who has seen a group of little children playing at "band" with no better instruments than an empty biscuit can and an old tin tray, realises what an appeal a band has for children.

By means of a set of percussion-band instruments the children learn a good deal about music. Suitable instruments for a school percussion band are drums, tambourines, cymbals, castanets, triangles, and bells. The children are told the names of each of the instruments, and are shown how to play them.

When the children first have the band they all play together, simply marking the rhythm of the music. They learn to play their instruments loudly and softly, quickly and slowly, as indicated by the music or the conductor.

PHRASING

One group of instruments plays the first phrase, another group the second, and so on. One phrase is played softly and the next loudly. The children play one phrase and keep silent for the next. They nod their heads or beat time for one phrase and play the next.

Different groups of instruments may take different phrases in the nursery rhymes.



A PERCUSSION BAND



STEPPING NOTE VALUES.

London's Burning

London's burning! London's burning! Drums.

Look yonder! look yonder! . Tambourines.

Fire! Fire! Bells and castanets.

But we have no water, but we have no water. . . . Triangles.

Hickory, Dickory, Dock

Hickory, Dickory, Dock . . . Castanets. The mouse ran up the clock . . Triangles. The clock struck . . . Drums. ONE Cymbals. And down he ran . . . Triangles. Hickory, Dickory, Dock . . . Castanets.

Three Blind Mice

Three blind mice Drums and cymbals. Bells. See how they run They all run after the farmer's wife Tambourines and triangles. Who cut off their tails with a carving knife Castanets. Did ever you see such a thing in Tambourines, your life as. triangles, tanets. bells. Three blind mice? . Drums and cymbals. four semiquavers instead of one crotchet and rest for another. The children try to discover how she has altered the rhythm, and tell her what alterations to make on the board. After practice of this kind the children will be able to make the necessary alterations on the board themselves. Such work helps the children to make up rhythms of their own, to write down simple rhythms played to them, and to read simple scores for the percussion band.

PULSE

Training in the recognition of pulse may be given in many ways. The children play the accented beat only, or one-half of the class beats time while the others play the accented beat, or they all play loudly on the first beat and then very softly on the others. The class is divided into groups, each group having a conductor. The first conductor conducts his group only when he hears music played in 2-pulse time. The second conducts his group when he hears music in 3-pulse time, and the third when he hears 4-pulse time. This exercise gives practice in conducting, and at the same time makes children alert to changes in pulse:

Crotchets are played in 2:4 time, and printed on the blackboard. The children are asked to suggest how the accented beat may be shown. Various suggestions will be given. They may suggest putting a line above each accented beat, or printing the accented note a different colour. The children are told how, for the sake of convenience, the system of putting a perpendicular line immediately before the accented beat is now customary. This is shown on the

chart with 4:4 and 3:4 time, using crotchets only. The children will see how this bar line separates the crotchets into groups of two, four, and three.

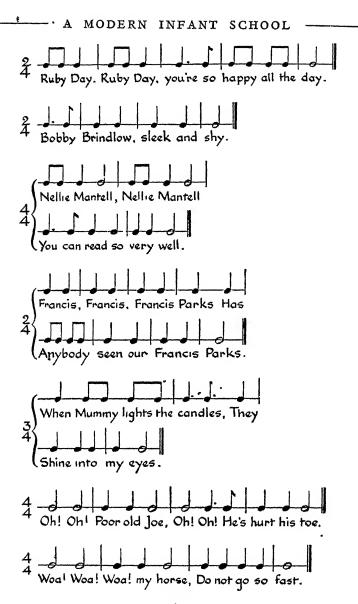
From their previous work the children know the relationship of the notes to the semibreve. They know that a minim is half a semibreve, a crotchet is a quarter, a quaver is an eighth, a semiquaver is a sixteenth. They are shown how the time signatures are written, the upper figure showing the number of beats in a bar, the lower figure showing the value of the beat.

Many of the nursery rhymes are written in compound time, that is, each beat being divisible by three. In 6:8 time, that most generally used in nursery-rhyme music, there are two beats to the bar, each being worth a dotted crotchet or three quavers. The children discover this when they beat one, two, while the teacher plays in 6:8 time. They find that she is playing a group of three quavers to each beat. This gives an opportunity for teaching them that a dot coming after a note makes that note half as long again.

After practice of this kind the children make simple rhythms of their own, putting in the bar lines and time signatures. Some of the rhythms composed by the children are given overleaf.

THE USE OF THE GRAMOPHONE

By means of gramophone records the children are given a wider range of musical experience than is otherwise possible in school. They hear records of different kinds of solo voices. They hear vocal duets, trios, and quartets, and



records of choirs. The children gradually learn to discriminate between treble, soprano, contralto, tenor, and bass voices.

The children listen to records of different instruments playing solos, duets, trios, quartets, etc., and records of a full orchestra. Records in which the different instruments of the orchestra play after one another, may be obtained. These are very useful, for they make it possible for the children to compare the sound of the different instruments more easily. By different parts of the record being played, the children may be given exercises in discovering which instrument is playing. They notice the different quality of sound produced by string, wind, and other types of instruments.

A collection of good gramophone records is invaluable for musical appreciation and interpretative work.

Chapter VII

LITERATURE

"LET's play at it," said a chorus of voices. The children had been listening to a favourite story, "The White Cat." They chose Leslie to be the "producer."

"Now, first of all we shall want the king," he said. "I'll have—I think I'll have Alan for king. Now, three princes. I'll have you, Tommy, and you, Kenneth, and you, Jack. The princes want horses, so I'll have Tony, Vera, and Harry. All the people I've chosen stand there! The king wanted his sons to find him the tiniest puppy, so I'll have to choose three tiny people. Come on, Charlie; you'll do. And Marjorie; and who else shall I have?"

"Alfred is small," said Hilda; "but Charlie's the smallest of the lot, so he'd better be the puppy that fits in a walnut shell, hadn't he, Leslie?"

"Yes, that's a good idea," said Leslie. "We want three ladies now."

"No," interrupted Patsy, "we only want two ladies and the White Cat, because the cat turns into a lady.".

"Oh, yes! That's right," agreed Leslie. "I was thinking we wanted three ladies as well as the cat. Well, I'll have you, Patsy, for one lady, and you, Nellie, for another lady. Now, for the White Cat I want someone who has white on. Oh! I can see a lovely white cat! It's you, Doris. You've got such a nice white blouse. Don't you think she'll be just right for the cat?"

The rest of the class agreed that Doris was "just right."





Then someone reminded Leslie that he had forgotten to choose the horses the princes were to find.

"I've chosen three horses," said Leslie. "There they are."

"But they're the horses for the princes to ride when they go out into the world. There should be three horses for them to bring back to the king."

"Oh, so there should! I'd forgotten. Hilda's tall, so she can be the swiftest horse in all the world; and I'll choose Florrie and Cyril. That's all we want, isn't it?"

The children had a property chest, in which they kept properties they made, or brought from home. A cardboard crown, made previously by the father of one of the children for another play, was given to the king to wear. The princes were provided with swords and three-cornered paper hats. There were two pairs of reins in the chest, and Eileen was asked to lend her skipping-rope to make reins for the third horse. The White Cat was given a wreath of flowers to put on when she changed into a beautiful lady. The two ladies were given hats.

A high chair was chosen for the king's throne. The cat sat on the other side of the room. The smallest puppy sat near the cat, and the swiftest horse in all the world was stabled in the corner. Chairs, to represent castle walls, were placed round this group. Two gangways between the desks represented the road which led to the sea, and the road which led to the town. At the end of each of these roads stood a lady, a horse, and a puppy. The princes' horses were stabled under the teacher's table.

When everybody was ready the producer announced,

"This is the story of 'The White Cat.'" Then he sat down with the audience and said, "Now, begin." Occasionally he prompted the actors and actresses.

The children should hear and dramatise many stories and poems, and, for this reason, part of each day should be devoted to literature.

The stories and poems read and told to the children should have real literary value. The children's tastes are being formed during the first years in school. It is found that children who have heard good stories and poems usually themselves select to read good literature.

The ethics of the stories and poems should be sound, for the children unconsciously gain ideals of life from the literature with which they are brought into contact. Stories and poems in which the main issue depends on a wrong action, should be rejected as unsuitable for young children, because the young child's sense of the difference between right and wrong is insufficiently developed.

The stories and poems should be suited to the emotional and mental stage of the children for whom they are intended.

Children of three to seven years of age enjoy simple folktales and fairy-tales. The youngest children enjoy especially those stories in which there is a good deal of repetition, as in "The Little Red Hen," "The Three Bears," "The Ginger-Bread Boy," "Chicken Licken," "Titty Mouse and Tatty Mouse," "The Three Billy Goats Gruff," "The Little Engine." The repetition of certain phrases gives the children a satisfying sense of familiarity with the story.

The adventures of such simple heroes as "Lazy Jack,"

"Mr. and Mrs. Vinegar," "Epaminondas" provide much fun. Such stories as "The Musicians of Bremen," "Pussy, will you have a Sausage?", "Brer Rabbit and Tar Baby," also have humorous qualities which stimulate laughter.

The traditionary fairy stories appeal particularly to children of five to seven years. Practically every child loves to hear about "Cinderella," "The Sleeping Beauty," "Snow White and the Seven Dwarfs," "Beauty and the Beast," "The White Cat," "Puss in Boots." Stories which deal very largely with the supernatural element should not be told too frequently.

The myths of different races are told to the older children. They love to hear stories of Etain, Cuchulain, Deidre, Ossian in the Land of Youth. They are thrilled by stories of Thor, Loki, Odin. The beautiful Greek myths, "Ceres and Persephone," "Pandora," "Orpheus and Eurydice," "Narcissus," "Hercules," "The Winning of Atalanta," "Jason and the Golden Fleece" are always enjoyed.

"Alice in Wonderland," "Through the Looking-Glass," "Water Babies," "Peter Pan," many of Kipling's "Jungle Tales" and "Just So Stories" are favourites with children of seven years old. Travel stories, both real and imaginary, stories of the adventures of such heroes as Robin Hood, St. George, Childe Roland, Ulysses, The Knights of King Arthur, appeal particularly to boys.

Many of the Bible stories are told. After telling a story to the children the teacher frequently reads the story to them from the Bible, so that they may appreciate the beauty of the language.

STORY/TELLING

Stories should generally be told rather than read to young children. In such stories as Kipling's "Jungle Tales" and "Just So Stories," the particular style of language should be preserved. If these stories cannot be memorised they should be read.

The language in which stories are told should be simple and good. It should be within the comprehension of the listeners, but the vocabulary should not be limited to that of the children. Unknown words which are vital to the understanding and enjoyment of the story should be explained beforehand. Sometimes pictures are helpful in explaining the meaning of words. New words may often be introduced into the story in such a way that their meaning is made clear by the context. An explanatory sentence may give the meaning of a new word, for instance, "... And there she saw the leprechaun dancing in the moonlight—leprechaun is a name for a brownie in Ireland."

The beauty of the teller's voice adds greatly to the charm of a story. The voice should be expressive and clear, but never loud. Clear enunciation is essential. If the words are said distinctly, an ordinary speaking voice will fill a large room.

The children should be so arranged that they can all see the face and gestures of the story-teller. Restlessness results if the children are unable to watch the speaker's face.

Sometimes the children wish to tell the stories they have heard or read. A child who had heard the story of "The Three Wishes" wanted to tell it to his little brother's class. It was suggested that he should tell the story to his own class first, so that he might take advantage of any criticisms. As he was not quite sure of the sequence of events, the children suggested that these should be listed on the board to help him prepare the story.

DRAMATISATION

When the children first begin dramatising stories and poems, some of them are reticent about joining in, but as a rule it is not long before they are affected by the interest and enthusiasm of the other children, and begin to take a part in the dramatisation themselves. Dorothy was an exception. She was a weakly, under-sized child of five years, and was very much repressed at home. During the first three months at school she spoke hardly at all, and rarely smiled. The story of "The Little House" was told to her class and the children wanted to act it. While they were choosing their paits, Dorothy left her place and walked to the front of the room. The teacher said, "What would you like to be, Dorothy?" Dorothy replied, "Little Mouse!" When it came to Dorothy's turn to speak, she spoke so softly that the words could scarcely be heard, but the rest of the class were very sympathetic, because they knew that Dorothy had never attempted to take part in acting a story before. At the end of the dramatisation one child said, "Wasn't that good for Dorothy!"

Children begin acting at a very early age. They play at being mothers and fathers, at being postmen, doctors, policemen, airmen, trains, motors, animals. This dramatic play

is very real to them. They live in the parts they are playing.

Leslie was running along the corridor when the head teacher met him. She had some roses in her hand, and as Leslie came up to her she said, "Look at these lovely roses, Leslie. Would you like to smell them?"

Leslie took no notice, but ran on into the classroom. Presently he told her that he would like to smell the roses. "I couldn't stop before," he said, "because I was a train then, and trains don't smell roses."

In his earliest dramatic play the child follows his own idea. He is making his own play, therefore it may be completely changed at any minute. Having been a peaceful father helping to look after a family of dolls, the child of three or four years may suddenly change into a roaring lion. This change is effected simply by imagining himself something different. He informs his playmates of the change in some such way as this: "I'm not the father now. You've got to run away from me. I'm a lion that's run away from his keeper at the Zoo." Thereupon the previous play is probably forgotten by all who took part, and the new one is continued until a fresh idea presents itself.

When the child begins to dramatise stories and poems, he is attempting something different from his previous dramatic play. Then he had only himself, and possibly a few playmates, to please. He invented the game himself, and was able to change it as he wished. When taking part in the dramatisation of a story or poem, he has to do what the character he is representing did. His first dramatic work of this kind is frequently nothing more than a few actions.

"Jack" and "Jill" take a pail between them, walking a few steps before Jack falls down and Jill follows suit. The first rhyme chosen by one group of four-year-olds for dramatisation was "Old Mother Hubbard." Louie asked to be Old Mother Hubbard, and Freddie to be the dog. Old Mother Hubbard went to a corner, and the dog followed her on all fours. Mother Hubbard stood and looked in the corner and the dog waited a wh. Ie. Then Louie turned and walked to her seat, and Freddie, after a scamper round the room on hands and feet, returned to his chair.

Soon the children begin to act more and to talk in character, often using the actual words of the story or poem. Sometimes they do not keep to the story they are dramatising, but put in words and actions that are irrelevant. For instance, Tommy was Father Bear. As he left his house to go for his walk he turned to his audience and said, "Toodle-loo! I'll be back presently after Goldilocks has been in." Other children become so much interested in one episode that they continue it too long, thus holding up the play. Jack was the Prince riding to the White Cat's palace. He galloped about with his horse until the audience became impatient, and called out, "Come on, Prince. You ought to be at the palace by now."

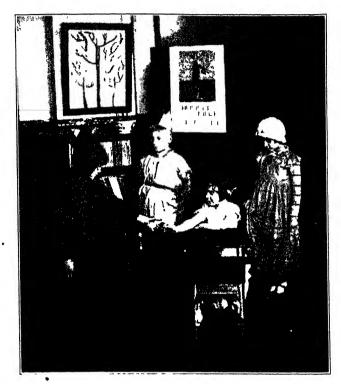
The children become more critical. They criticised Tommy for saying "Toodle-loo." "Father Bear had nobody to say 'good-bye' to, really." They showed their impatience of Jack's delay in arriving at the White Cat's palace by calling out to him. They call out these criticisms as they occur to them. "You've left out a piece, Joyce";

or "I can't hear the King"; or "Go on, Billy; you have to go to the cottage next"; or "The Prince ought to dance with Cinderella now."

The children are trained to reserve their criticisms, and to offer them in a discussion at the end of the dramatisation. Thus the play is not interrupted, and the actors are better able to benefit by the suggestions offered. One child said that he could not hear the words spoken by one of the actors because he turned his back to the audience. Another, speaking of the Queen in "Snow White and the Seven Dwarfs," said. "You know, her face didn't show that she was angry when the Mirror said that she was not the most beautiful lady in the land. She looked just the same all the time." After "Sleeping Beauty" someone remarked, "I like the way the King and Queen and all the servants went to sleep this time. It really looked as though they were falling asleep." One child felt that the king should be beyond reproach, "I don't think Harry should be king if he doesn't sound his attches. Whoever heard of a king who couldn't remember his 'blowing' letters?"

Suggestions for the improvement of "side-play" are often given during these discussions. A question, "What do you think the old woman would do while she was waiting for the Gingerbread Boy to cook?" brings forth suggestions that the old woman would get on with her cleaning, that she would sit by the fire and knit, that she would peel the potatoes for dinner, that she would wash up the breakfast things.

Once the children are interested in the possibilities of side-



NELLIE, PATRICIA, RUBA AND LESLIE PREPARED A PLAY CALLED "HUMPLE STUMPLE" AND ACTED IT BEFORE THE REST OF THE CLASS

play they sometimes pass through a stage when the side-play becomes so engrossing that it detracts from the main interest. Such a case is brought up for discussion at the end of the dramatisation.

Groups of children sometimes get up plays entirely on their own and present them to the rest of the class. They may dramatise a story already known to the class or select a play from a book in the library. One group made up a play about Red Indians. They wanted an Indian dance in the play, so asked the teacher if she would find them some suitable music. She played several pieces to them, and they chose Coleridge-Taylor's music for the dance of Pau-Pu-Kewis in "Hiawatha's Wedding Feast." Another group wanted a song about a certain little red bird who was an important character in a play. One child made up some verses, the first being:

"Hark to the little red bird
Who sings the whole day long!
His is the song that makes us happy
All the day long."

The group asked the teacher to help them set it to music.

PROPERTIES

The children make and collect their own properties for their plays. Sometimes the most unlikely materials are made use of. One group used part of an old easel for a plough. A few clothes horses serve many different purposes: they are used as fences; two put together make a stable or the house

M.I.S.-N

of the dwarfs: material is draped over one, and this is placed behind a chair to give it the dignity of a throne.

Butter muslin, unbleached calico, and odd pieces of white material are transformed into colourful materials for the dresses of the Queen and her ladies. The children paint designs on the materials, using poster paints, coloured inks, or cold-water dyes. Sometimes several designs are worked out on large pieces of paper, and the children select the one they think most suitable for the purpose they have in mind.

Two of the older boys, who were both kings in different plays, wanted to make crowns for themselves. They wished to make something more elaborate than the simple pointed crowns they already possessed in the property chest. They searched through many picture books and copies of the "Children's Encyclopædia" in order to get fresh ideas. A spirit of friendly rivalry sprang up between them. They both sketched out their own designs, and afterwards made their crowns from cardboard, decorating them with gold paint and brilliant colours to represent priceless gems.

A class property chest often contains a varied assortment of properties. A piece of brightly coloured velvet does duty for many things. It is a cloak when it hangs from the prince's shoulders; it is placed over a cushion on which the herald carries round the "glass slipper"; supported on four sticks it is a canopy. An old top hat and an umbrella are made use of by many different characters. A tin or wooden sword and a paper hat are sufficient to turn any boy into a soldier. A long frock and a pair of spectacle frames make a grandmother. A rug thrown over the back of a child who

prowls about on all fours will convert him into a bear or a wolf as occasion demands. Treasures are often loaned to the property chest for a time. When Nellie was the Queen in "The Beautiful Song" she brought the veil she had been christened in to wear in the play.

POETRY

The traditionary nursery rhymes are the most suitable verses for the youngest children. The content is simple, they have a well-marked rhythm, and an abundance of alliteration and simple rhymes. Practically every child has some association with such rhymes as "Once I saw a little bird"; "Jack Sptat"; "I had a little donkey"; "Baa, baa, black sheep"; "Polly, put the kettle on"; "Little Jack Horner"; "Pussy cat, pussy cat, where have you been?"; "Mary, Mary, quite contrary"; "Hush, baby, my dolly."

The children hear a great variety of poetry differing in style and content. They hear simple lyrics and sonnets, longer ballads, narrative poems, folk songs and labour songs. They quickly have favourites. Humorous verses are usually popular, and many of the verses the children compose themselves are full of humour. Some children prefer imaginative poems, others prefer poems about nature. Ballads and simple narrative poetry appeal to children of seven and eight years old.

The children should learn some poems by heart, because the recitation of rhythmic verses gives them joy, and also because their minds thus store beautiful phrases and images. They ask for their favourites many times, and gradually learn the words by hearing them read or recited. They imitate the teacher, and learn to say them expressively and naturally, preserving the natural rhythm of the verse. The older children learn poems they choose themselves from the anthologies in the class library.

Most of the poems learnt by heart are recited individually, but some rhymes and poems are suitable for reciting in chorus. Recitation in chorus sometimes helps to give the children a greater feeling for the spirit and rhythm of the poem. Some rhymes and poems are treated as dialogues between two children, or between one child and a group of children.

The older children become interested in the rhythmic patterns of the poems they hear, and sometimes try to make verses of their own based on the patterns they have discovered. They also become interested in rhymes and make rhymes in their own verses.

Many of the early attempts of the children are very crude, but they help the children to gain a feeling for rhythm and balance and to appreciate words. The following are some verses made up by children:

There is a little poppy Dancing on your pretty frock. There is a red, red poppy Dancing, dancing, dancing.

JANE. Age 5½ years.

There was a little girl
She had a little cat.
That little girl is me,
And it's my little cat.

WINIFRED. Age 6 years.



DRAMATISING STORIES

WHO HAS BEEN EATING MY PORRIDGF?



PAINTING MATERIAL, AND MAKING CUPS AND SAUCERS FOR A PLAY,

WHEN THEY ARE FINISHED WE SHALL SEE THEM CAST IN PLASTER



BUILDERS

ARTISTS

I had a little dolly
And I broke it on my birthday.
It was a very long time ago.
My mother bought a book
And I tore it on my birthday,
But my mother didn't hit me, Oh, no!
MARJORIE. Age 6 years.

I bought some onions
To put in my dinner,
And when I took them out
My dinner got thinner.

Tony. Age 6 years.

The Monkey

A monkey ran up a tree,
He said, "I am free."
"You are a scamp
For putting out the lamp,
But won't you come back to me?"

CONNIE. Age 7 years.

Dancing Song

The Fairies dance,
The Fairies dance,
And the Elves dance too.
They dance so well
I'd love to tell,
But that would never do.

Ivy. Age 7 years.

The Fair

I saw some swings up in the Fair,
It was a summer's day.
Some coco-nut shies were also there,
But there you had to pay.

CECIL. Age 7 years.

Dancing

I was dancing with some boys Upon a Saturday night. We kept on dancing and then We began to fight.

We were dancing in the hall,

We made two long lines,

It was a game called Chinese Wall,

We played it many times.

WILLIE. Age 7 years.

Part of Rupert Brooke's poem, "The Great Lover," was read to the children in the top cizes. They discussed the way in which he had described the things he loved, noticing particularly the use he had made of "describing" words. The children were asked to write down the names of the things they loved, making use of "describing" words. When they had finished, the children read them out and the teacher wrote them on the blackboard.

Swaying flowers, fine rain, golden sands, rosy apples, sweet scent of flowers, silver rain, sky rainbows, silver dew, juicy apples, Good God, listening to music, golden day, beautiful rainbows, flowing sea, thick snow,

twinkling stars, singing songs, laughing with glee, blue sea, green sea, silver stars, the noise of trains, soft fur to touch, loud thunder, Beautiful Baby Jesus, smooth pencils, drooping flowers, light sands.

It was suggested that the children should try to make a poem similar to that of Rupert Brooke's. The teacher pointed out that they could put together some of the words describing the same thing. For instance, instead of saying "swaying flowers, drooping flowers," they could say "swaying, drooping flowers." The children readily adopted this idea. They made suggestions, and these were discussed by the whole class before they were written down.

First, they adopted the teacher's suggestion about the flowers, and said they would begin the poem with "Swaying, drooping flowers." Nellie suggested that "sweet scent of lovely flowers" should follow the first line. When "silver dew" had been written down, the children could not decide what they would put next.

The teacher said, "Tean see two words on the board that might be used there. Do you know the kind of day which follows a heavy dew?"

- "A fine day," said Harry.
- "But we haven't got 'fine day' on the board," said Nellie.
- "We've got 'golden day,' and that means a fine day," said Bobby.
- "Let's have 'silver dew, and the golden day following after," suggested Patricia. This was written on the board.

Much discussion centred round what they should say about the sea.

"We've three things to say about the sea," remarked Beryl. "It's blue and it's green and it's flowing. How can we say them?"

"Sometimes the sea looks mixed up blue and green," said Cyril, "I've seen it like that at Southend. We could put blue and green together and say blue-green."

"Yes," said another, "and if we put 'flowing sea' with it, we shall have blue-green flowing sea."

Glyn thought that the words "twinkling, silver stars" should follow "thick snow." "When I was in Wales at my auntie's, the stars were always more silver and twinkling when it was frosty and there was snow on the ground," he said.

It was Glyn who suggested that, after the words "rosy, juicy apples," they should put "fruits that grow abroad." Various suggestions with regard to fruits had been made; but Glyn said, "If we have 'fruits that grow abroad' it will mean all the things we have been saying, and we shan't have to use so many words."

Vera suggested that "Good God" should follow the line, "Light, golden sands; the blue-green flowing sea."

"I don't think so," said Frank.

"Where do you think it should be?" asked another child.

Frank stood up and said, "Let's put 'Good God' right at the end, because then it will be like God looking back over the world and all the things we love right to the beginning."

At another point in the discussion Nellie said, "I think we'll have 'Beautiful Baby Jesus' right at the end."

Frank's face was eager as he stood up again, "Don't you think that 'Beautiful Baby Jesus' should come just before 'Good God'? You see, 'Good God' ought to be a little way off Baby Jesus, so that when He looks back over the things we love He will see Baby Jesus too. I think 'Good God' should be right at the end."

"Yes, that's lovely!" exclaimed Vera. "Let's have it the way Frank says."

Such discussions as these centred round every line of the poem. Finally, the children were satisfied with it. This is its final form.

All these we love:

Swaying, drooping flowers;
Sweet scent of lovely flowers;
Fine silver rain; and beautiful sky rainbows;
Silver dew, and the golden day following after;
Light golden sands; the blue green flowing sea;
Thick snow, and twinkling silver stars;
The noise of trains and Loud thunder;
Running and dancing, and listening to music;
Rosy, juicy apples, and fruits that grow abroad;
Soft fur to touch; smooth pencils to hold;
Singing songs and laughing with glee;
Beautiful Baby Jesus and Good God.

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